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CALIFORNIA MEDICAL GAZETTE.

CALIFORNIA

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ORIGINAL COMMUNICATIONS.

THE MIASMATIC DISEASES OF CALIFORNIA.

By J. CAMPBELL SHORB, M. D., San Francisco.

GENERAL OBSERVATIONS.

Some ten years ago, we remember listening to the last lectures ever given by Dr. George B. Wood, at that time Professor of the Theory and Practice of Medicine at the University of Pennsylvania. In his brilliant and comprehensive remarks on the etiology of disease, we recall the very earnest manner in which he dwelt upon the necessity of watching carefully for periodicity in the various morbid processes, representing the frequency of miasmatic complication, and the ease with which the intercurrent trouble absorbed, as it were, the previous disorder, and became itself the prominent malady. He showed how rapidly the question of recovery was solved when this periodicity was fully recognized; how lingering the progress of a case, its often fatal termination, where from inattention or ignorance the medical attendant failed to discover the real source of mischief.

The lesson has never been forgotten, and professional experience has daily furnished us with strongest evidence of its value.

It may be urged, we are writing on subjects with which the whole respectable profession are perfectly familiar; that we are dealing with the most elementary truths of medical practice, and that our remarks, which a century ago would have been more or less appropriate, are, in these more enlightened days, positively useless. But in medicine, as in every other art or science, we learn by repetition, and this general truth explains away in part the force of the above objection, which, we believe, is more fully removed by reflecting on the frequency so often observed, with which many excellent practitioners neglect to avail themselves of the advantages flowing from a practical knowledge of the simple truths we propose to consider in the following pages.

The importance of these truths we hold to be of a very high order everywhere, but in this city and in many portions of this country it can scarcely be overrated. Isothermal disease, in forms more or less modified, is the disease of the country. We have noticed its constant occurrence everywhere; in Oregon and along its seaboard down to the extreme southern counties of California; on the coast and in the interior, everywhere. Sometimes it appears in characters about which there can be no mistake; at other times it is masked by some intercurrent morbid process, or is in itself more or less obscure in its peculiar manifestations. Careful examination, even in doubtful cases, seldom fail to reveal the true nature of the malady, and point the way to speedy and successful treatment.

Not many years ago, miasmatic disease was supposed to reside in fixed geographical limits, growing out of peculiar agencies there existing, occurring at certain seasons of the year, under some atmospheric conditions generally recognized as necessary preludes to its evolution. It was regarded as a very systematic kind of distemper, always ushered in by the same symptoms, and marked in its progress and termination by characteristics which were found associated with it from the day it was first described in medical literature.

As observation extended—as medical records multiplied and were compared, and professional experience became more catholic in its diffusion, miasmatic disease was found to have enlarged its boundaries; it was not so localized in its visitations, and in many places once deemed remote from its influence, it began to intrude its unwelcome visage.

Two very apparent and powerful causes seem to be concerned in the more extensive distribution of the disease: First, the changes which are constantly taking place on the surface of the earth in obedience to certain physical laws, develop conditions favorable to the propagation of the disease. Secondly, the spirit of progress, under the inspiration of which cities are built and forests cleared, mountains leveled, vallies filled up, rivers spanned, and the waste places of the land made to blossom with wondrous harvests, has unwittingly opened up new fields for the more extensive growth of this distemper. Rivers have been dammed and countries overflowed which before were dry and healthy; water courses have been taken from their native channels and carried where human industry demanded their busy currents; the axe has felled the forests which kept the disease at bay; and the plow has turned up the earth, dry on top, while the subsoil, pregnant with animal and vegetable matters in a decomposed state, has poured in deadly volumes its pestilential exhalations into the atmosphere. Then man has steadily marched from the rising towards the setting sun. The tide of emigration has been pouring its multitudes into the new regions of the West, and the unexplored fields wherein the foot of man had never before rested, pleasing the fancy of the way-worn emigrant, became the sites of dwellings and of towns, and the sluggish river and the deadly marsh near by offered no obstacle to the development there of the industrial interests and the rapid growth of these new domains. While the spirit of progress has been carrying man into pestilential regions, his genius has been busy at work devising means to render the unfavorable conditions surrounding him innocuous; and the discoveries and improvements of science, carried by his industry into practical effect, have already achieved magnificent results. Much yet remains to be done, and if the past be any earnest of the future, we may wisely conclude that as time goes by science will gain still more signal victories over pestilence, until the latter be ultimately exterminated.

Coincident with the discovery of the diffusion of miasmatic disease came the more intimate acquaintance with its various forms. As the means of diagnosing it improved, and the knowledge of these means became more universal, it was detected in strange and unusual garbs, manifesting certain eccentricities of invasion and duration which at an earlier period would have expelled it from the classification of paludal disease. Other morbid processes than fever were discovered growing out of the causes which developed the typical disease. These were the various neuralgic troubles, at times scarcely amounting to positive discomfort, and of short duration; at others, reaching an intensity of agony seldom seen in the whole range of human suffering, and prolonged for months, even years; hemicrania, brow ague, intercostal pains closely allied to the rheumatic affections, and the whole family of disease to which the general term neuralgia has been applied.

All of these morbid processes were more or less clearly marked with that periodicity, taking cognizance of which has led the profession to such wonderful successes in the treatment of this form of disease. Many revolutions have taken place in the various settled opinions in reference to the origin of miasmatic disease. The first probably followed close on the discovery that it could occur in situations where no reasonable suspicions could be entertained of the existence of paludal poison. It was found at times, commencing as far back as the sixteenth century, in the various large cities of Europe, and in particular portions of these cities deemed the most healthy by the profession, and where the most patient search, conducted on erudite principles, failed to reveal any tangible cause for its occurrence. The exclusive marsh origin was extensively discussed and finally abandoned, failing as it did to explain many of the mysteries connected with the presence of this disease. The late cryptogamic theory, though brilliant, is destined, we believe, to have a meteor's existence and disappear forever. In all parts of the world where the study of medicine is prosecuted with a zeal and intelligence commensurate to the general inquiring spirit of the age, the question of the origin of this disease is receiving a vast deal of attention. It may be years before it is definitely settled, it may remain forever beyond all human ken, but we cannot believe that all the labor spent upon it will be entirely without fruit. Failing to demonstrate the source, it will have added many valuable facts to our sum of knowledge on the subject, and definitely fixed the treatment for it and its associate maladies for all time.

In reference to what is established regarding the etiology of this disease, a distinction must be drawn between miasmata and malaria. By common consent of medical writers, the term miasma is applied to that form of pestilential exhalation which arises from the stagnation of fresh water over animal or vegetable matter in a state of decomposition. It is marsh poison in a word, and is the more general of the two terms; malaria being used to denote such poisonous matters as arise from more circumscribed or localized agencies, such as defective drains, choked sewers, foul sinks, badly ventilated or over-crowded dwellings. Malaria is also used to denote the effect, being applied to that peculiar unwholesomeness of the air resulting from the admixture in it of the miasmatic exhalations.

By the earlier writers it was believed and taught that mias-

matic disease could never arise except when the conditions comprehended by the term miasmata were present. This belief has descended to our day, and there are numbers of medical men in excellent standing everywhere who still believe in the doctrine.

Of course it cannot be doubted that the disease occurs more extensively and severely in aguish districts than anywhere else, but very pure forms of it are found at great distances from such localities, and where the general conditions of situation, air, food and drink are excellent. If their occurrence here is inexplicable on the score of miasmata, a reason must be sought in malaria or in some of the other subsidiary causes of the disease.

It is useless in this day to uphold the older writers in their assumption of the *one* cause of miasmatic disease. Experience has demonstrated that they were wrong, also, in ascribing it to the stagnation of fresh water over animal or vegetable matter in a state of decomposition. Their teaching on this point is very direct, and admits only of one construction. Salt marshes cannot originate the disease. If there be any who doubt the correctness of this assertion, they are referred to the lectures of Marshall Hall on the subject of fevers. Today, there is scarcely a medical writer who stands higher than he, or is more frequently quoted as an authority. He teaches clearly that salt marshes do not engender miasmatic fevers, and cites, if we recollect aright, the marshes which surround Venice. Such, too, was our belief when we first came to this coast eight years ago, but a little experience weakened this belief, and led us ultimately to reject it altogether.

(*To be continued.*)

CASE OF CONGENITAL IMPERFORATE RECTUM, SUCCESSFULLY TREATED WITHOUT A CUTTING INSTRUMENT.

By J. D. B. STILLMAN, A. M., M. D.

In the year 1848, a case of congenital malformation of the rectum occurred in my practice, that was operated on by Dr. Willard Parker, of New York, with a bistoury. He succeeded in reaching the rectum above the obstruction, and discharging the contents, but the infant died soon after. I then thought that should another case like it occur to me, I would adopt another method. The uncertainty that must necessarily exist as to the extent of the malformation above the anal terminus, will always render the success of any operation by any method doubtful.

I was called to see a male child of C. Y——, at No. 363 Jessie street, on the 12th of April, 1864. The infant was four days old, and had not had an evacuation of the bowels, had worried much, and was now almost continuously vomiting. The point of a catheter could be carried through a well formed anus about three fourths of an inch, when its further progress was arrested. An examination with the finger confirmed the nature of the difficulty.

There was a perfectly formed cul de sac, the fundus of which was firm, and resisted all the force I deemed advisable to use. Its depth was not far from three fourths of an inch. I had now a case, as far as could be determined by antemortem examination, like the one fruitlessly operated upon by the knife twenty years ago.

What lay beyond the membrane that resisted the further progress of the finger, who could tell? Was it a simple diaphragm of a line or two in thickness? If so, I should be able to detect the distended sack above. Or was the rectum, though formed above the cul de sac, still adherent by its opposing surface through several inches of its course? Was it atrophied to a cord or rudiment of a gut? Were the two sections of rectum running parallel to each other, as in the cases reported by Amussat, Goddard and Curling? or was the rectum wholly wanting? These were conditions either of which was possible, but the determination of which was not possible by any means of diagnosis we possess.

Of the thirty-one cases tabulated by Mr. Curling in the forty-third volume of the "Medico-Chirurgical Transactions," in which the external portion terminated in a cul de sac, as in the present case, sixteen were successfully operated upon, so far as reaching the gut was concerned, and ten were reported cured. Of this number two were dismissed, as the time that intervened between the operation and the date of the reports was too short to admit of satisfactory conclusions being drawn respecting them. All the other cases terminated fatally. The cause of death in all cases where the gut was reached was either from injuries inflicted by the knife or trocar upon contiguous tissues, or from the difficulty of maintaining an opening. These results are almost unavoidable when a cutting instrument is used, except in those cases where a protruding diaphragm gives a certain guide for the instrument. Where the gut is collapsed or attenuated, the cutting instrument can scarcely fail to miss it course and find its way through the cellular tissue around it. In such cases, even when the object was reached, it was found impossible to maintain the opening through the fistulous track. These considerations determined me to try a blunt pointed instrument, trusting to the strength of the fibrous coat of the intestine to retain the instrument within its walls, if there were any; and, in case there were none, it could not fail to reach the pouch above as safely and as surely as a cutting instrument.

I accordingly prepared myself with a number of bougies, to meet any contingencies. I told the parents that I had but faint hopes of saving the child, but I thought it proper to afford the little chance that the operation could give. I first attempted the passage with a No. 12 English bougie; but after using as much force as I deemed safe for fear of transverse laceration of the gut, I next introduced a conical-pointed wax, of the size of about No. 6, and pushed it in the direction where I ought to find the upper portion of the rectum. This was carried up about two inches, or until resistance ceased. On withdrawing the instrument, only the color of the meconium on its point showed that I had accomplished the object. I then introduced the larger bougie, which had failed before, and carried it up in the track of the smaller one, and, upon withdrawing it, I had the satisfaction of seeing a discharge of about four ounces of meconium with flatus. The passage was further distended by larger instruments, until a free passage was afforded. No further treatment was found necessary. The vomiting ceased and the child rallied from a condition so low as to give no sign of pain during the operation. Some months afterward defecation was difficult, but not sufficiently so to warrant interference, and when three years old it entirely disappeared.

CASE OF LARGE FIBROUS TUMOR OF UTERUS REMOVED BY ENUCLEATION AND AVULSION.

By JOHN SCOTT, M.D., F.R.C.S.I., F.E.S.L., etc.
Surgeon to the California State Woman's Hospital.

The frequency of fibrous tumors of the uterus, the serious results to which they give rise, and the fact that, till lately, all attempts at their removal have been, with few exceptions, either fruitless or attended with the utmost danger to the patient, are, I think, a sufficient apology for my laying before the profession the following very interesting case:

Mrs. J——, aged 45; married twenty-four years; one son living, aged 23 years. *History*—Well up to five years ago, when a severe hemorrhage came on and lasted for a week. The following menstrual period another severe bleeding came on, which lasted much longer, and from that time to the present—a period of five years—she has had constant hemorrhage for three out of every four weeks. The quantity lost at times, particularly at the catamenial periods, has been enormous, while at other times it has consisted of a constant passive drain, aggravated by the slightest exertion, producing such weakness and exhaustion that her death was looked on as imminent.

16th March, 1868.—*Present State:* Patient exceedingly anemic; pulse 120, weak, intermittent and compressible; cardiac bruit; sleeplessness, edema, great debility. On examination, the uterus felt as large as a four and a half months' pregnancy; hard and lobulated to the touch, and lying over to left side; per vaginam, the organ was felt low down in the pelvis; the os thin and dilated to a little more than the size of a dollar, with a firm, smooth tumor projecting through it. Was able to pass the finger between the tumor and uterus for a considerable distance in front and to right side; but posteriorly and to the left side, it was found attached by connective tissue, which was easily broken up by the finger. The speculum revealed a glistening tumor protruding through the os, the distended uterus filling up the pelvis.

As the patient had but recently lost a very large quantity of blood, and it was feared that a recurrence of hemorrhage

might prove fatal, I recommended her to submit to an operation for its removal, to which she at once consented. I at once divided the cervix with a scissors, and having controlled the slight bleeding with perchloride of iron on lint, I ordered an aperient preparatory to the operation. Drs. T. Bennett and W. H. Davies kindly assisted me, and the patient being fully under the influence of chloroform, I began the process of enucleation by breaking up with my finger, as high as I could reach, the connective tissue which bound the tumor to the uterus, and then used a uterine sound for the same purpose. I then fastened in the tumor a strong vulsellum, but, with the utmost traction I could employ, assisted by Dr. Bennett, I was unable to move the tumor in the slightest degree. As the os was insufficiently dilated to allow of the passage of the tumor, I enlarged the incisions on each side, and having got a blunt hook high up over the tumor, and with the vulsellum attached below, we did our utmost by traction to dislodge it, but without success. Every pull brought the uterus with it, till it at last seemed as if the organ would come out entirely. We then determined on endeavoring to divide the tumor *in* the uterus, and deliver it piecemeal. For this purpose, I managed to introduce an ecrasseur, carrying a steel wire, and, after some manipulation, got it well over the tumor and divided it. On extraction, we found that about one third of the tumor had come away. At this stage of the proceedings, the patient appeared likely to succumb under the chloroform, but respiration was soon restored, and the operation proceeded with. I was now enabled to pass my hand higher up, and having enucleated as much as I could reach, I again got the ecrasseur in and cut through the greater portion of the remaining tumor, and having extracted it, I passed up my hand and detached the remainder. To ascertain that nothing was left, I again explored the interior, when I found a small fibroid at the highest portion of the cavity, and shelled it out with my finger and extracted it. The operation had lasted just one hour and ten minutes, and the patient had not lost more than six ounces of blood. The patient made an uninterrupted and rapid recovery, and since then has continued to gain health and strength, and has had no return of the bleeding; and the following menstrual discharge lasted between four and five days, and then disappeared. I requested an examination a month after the operation, and finding that the uterus remained harder and somewhat larger than natural, and that a whitish discharge existed, I dilated the cavity with a sponge tent, and injected tincture of iodine, with the happiest effects.

The tumor weighed two pounds, was seven inches long, twelve inches in circumference, nodulated, and had a distinct fibro-cellular investment. It had evidently been an intramural growth, its nidus being high up in the left wall of the fundus, from which it had been extruded by uterine contractions.

Hitherto, the treatment of fibrous tumors of the uterus has been to the last degree unsatisfactory and discouraging; for, while hemorrhage, generally of an alarming kind, has been the prominent symptom attending them, hemostatic remedies are unavailing, and too often the physician has had to stand helpless by, while his patient perished before his eyes. I speak more especially of intramural tumors, which, from their mere presence in the uterus, act as a constant irritant in increasing and prolonging the congestion of menstruation, and giving rise to a passive hemorrhage, which increases as the patient grows anemic, till, as in the above case, it is almost constant. When the tumor has become pedunculated (a fibroid polypus), or the process of enucleation has been so far completed by Nature, that it is held by only slight attachment, the removal by the scissors or ecrasseur is not difficult; but, where the tumor is attached by a broad base, or only projecting into the uterine cavity, the difficulty of arresting the hemorrhage and removing the growth has been formidable, indeed. To Mr. Baker Brown we owe the very valuable suggestion of splitting the cervix, as a mode of arresting the hemorrhage; and while this practice may fail, and probably would fail where the hemorrhage has its source in venous sinuses, existing between the tumor and the uterus, it is eminently successful in the majority of cases where the bleeding is *capillary* and of a passive character. In October of last year, I was called to see a case where no other treatment was available, but in which it was eminently successful. I found the patient, a married woman, aged 35 years, perfectly exsanguino, and reduced to the last degree of debility from a hemorrhage which had existed for years, but had been incessant and enormous for the last four months. The uterus was enlarged to the size of a five months' pregnancy, was hard and uneven to the feel, and projecting over the pelvis and to the left side. On examination per vaginam, I found the uterus so anteverted, that it was with the utmost difficulty I could drag the os partially into the field of vision, and the cervix and body of such stony hardness, that I could make no proper diagnosis of the contents. There was no erosion, and the os was white and bloodless in appearance. Suspecting that it might be a case of hard schirrus, I was at first afraid to interfere with it, but the continuance of the hemorrhage impelled me to do something for relief. With a curved scissors I divided the cervix up to the vaginal junction on each side, and subsequently dilated the canal with sponge tents, followed by injections of carbolic acid and glycerine—one part to six; and from that moment to the present there has not been a drop of bleeding. Even the catamenia have entirely disappeared. I sent the patient to the country to recruit, and she returned fat and strong, capable of undergoing almost any exertion, and scarcely suffering any inconvenience from the tumor, which had diminished to less than one-half its former size. After a lapse of three months I again examined the patient, and found the uterus more anteverted than ever, of stony hardness, and exhibiting but a trace of the incisions; but, as the tumor had not increased in size, and she continued to enjoy good health, I left matters as they were.

While Clay, of Manchester, Baker Brown, and others in Europe, Atlee, of Philadelphia, and Peaslee, of New York, have successfully removed *individual* tumors, the credit of successfully initiating a more daring and far more successful practice is clearly due to Dr. Matthews Duncan, of Edinburgh, whose late writings and cases merit the attention of the profession. He has demonstrated the possibility and the *safety* of removing fibrous tumors of large growth, where Nature has only begun the process of enucleation, and where the degree of violence used in dislodging them from and dragging them out of their bed is such that most men would stand aghast at a procedure they would at first look on as unwarrantably dangerous to the patient. His mode of procedure may be briefly summarized: Where uterine hemorrhage is caused by the existence of a fibrous tumor, the object is, first, to arrest the hemorrhage; and, secondly, to remove the tumor in such a way as may be most practicable in the particular case. To avert the hemorrhage, incision of the cervix by the scissors or the bistoury (the scissors being much preferable) is frequently found efficient; and if bleeding occurs from the operation (which it seldom does), a pledget of lint soaked in solution of perchloride of iron will check it. Subsequently, the canal should be dilated with sponge tents, and then an exploration of the cavity will determine whether the tumor has become pedunculated—if enucleation has only been partially effected, or if the tumor is simply projecting into the uterine cavity. Where the tumor is attached by a neck (a false polypus), the latter may be divided by the long curved scissors, by twisting and dragging the tumor, or by the ecrasseur, as may be practicable. Where enucleation has been partially effected, a strong vulsellum is inserted into the tumor, and traction, steady and long continued, is used till it is dragged from its bed and delivered. In cases where enucleation has not begun, or only partially advanced, a different course is advisable. The hemorrhage having been restrained by division of the cervix (and, if necessary, the injection of perchloride of iron), a knife should be passed into the uterus, and the tumor incised through its whole length; ergot should be given, and it will be found, after a variable time, that the contractions of the uterus will sufficiently extrude it into the cavity to allow of operative proceedings being undertaken. In one of Dr. M. Duncan's cases, the operation lasted a whole day, and yet, notwithstanding the violence used, the patient made an uninterrupted recovery. The greatest difficulty has been found in delivering the tumor, when separated, through the narrow os and contracted vagina, the perineum having sometimes given way in the attempt. To obviate this, I would suggest the division of the tumor *in the uterus*, as effected in the case I have narrated; but, had I not had the ecrasseur I used, I could scarcely have accomplished it with those ordinarily in use. The chain is clumsy and unmanageable, and the *twisted* wire is difficult to pass up over a tumor which entirely fills the organ, and even the strands often give way in cutting through such a dense mass. The ecrasseur I use is armed with a single wire, made of the best Swedish steel, *unannealed*, and though rather stiff, it retains any bend you give it, while it is so tough that it will cut through the largest and firmest tumor as clean as a knife. I have used it in amputating the cervix uteri, and by bending the wire to a right angle, the division has been effected as directly transverse as if effected by the

knife externally. With this instrument, the tumor may be divided in utero and extracted piecemeal; and, furthermore, it will not be found necessary to use such violent traction in future, for the greater portion of the tumor having been extracted, the remainder can be easily enucleated and removed by the fingers. In Dr. Duncan's cases, the patients were invariably freed from hemorrhage and restored to health; but he notices the continued existence of a glairy or watery discharge afterwards, to which he seems to have paid no attention. My practice is to examine such cases afterwards, and having dilated with sponge tents, I find that an injection of iodine, repeated, if necessary, after one or two periods, has the effect of restoring the organ to a state of integrity, and of checking the tendency to future growths of the same kind.

ON THE ACCOMMODATION OF THE EYE.

By GEORGE H. POWERS, M.D.,

Surgeon to Ophthalmic Department of City Hospital, and Oculist and Aurist to San Francisco Dispensary, etc., etc.

Since the invention of the ophthalmoscope, the knowledge of the human eye, in respect both of its action in health and its condition when diseased, has vastly increased, and out of a chaos of suppositions, which were the only guides for oculists before, have emerged well defined and thoroughly proved theories and maxims.

In this so broad and entertaining field of study, the one point which forms the subject of this article covers a large area, and the amount of absorbing attention and minute investigation requisite to master it in all its details, ought to be a sufficient apology, if one be needed, for the physician who becomes a specialist in ophthalmic practice.

What do we mean by accommodation of the eye? It is the faculty, or rather the action, which enables the eye to distinguish a near as well as a remote object.

It is a power shared by almost all who have any vision, but, although requiring the exercise of volition, it becomes so much a thing of habit as to be almost instinctive, and passes unnoticed except the attention is called to it by some derangement.

That it involves some change in the eye itself, may be proved by any one to his own satisfaction by first looking intently upon a printed page held at arm's length, and then suddenly bringing the book near the eye. When the change of distance is first made, the letters look blurred and indistinct, and there is a sensation almost amounting to pain in the eye-ball; but presently this feeling vanishes and the type appears clear as before. Now, what is the seat of this intra-ocular change? It is proved by a series of experiments, invented by Cramer, Helmholtz, Langenbech, and Donders, that the only real change is in the crystalline lens, which becomes more convex when the eye is called upon to exercise its perceptive power upon a mere object. More than this, the increase of convexity is proved to occur principally in the anterior surface of the lens, which at the same time approaches nearer the cornea, while the posterior surface does not materially alter either in curvature or distance from the cornea.

The experimentum crucis consists in observing the images of the flame of a candle held obliquely before the eye at such an angle that three images may be distinguished—one upon the cornea, one on the anterior surface of the lens, and one on its posterior surface, or rather on the anterior surface of the vitreous, which forms a concave mirror. If the relative situation of these three images be carefully noted while the eye is directed toward a distant object, and the eye be then directed to a near object, it will be seen that the image on the cornea remains stationary, and that on the posterior surface of the lens recedes but very slightly, while that on the anterior surface both approaches much nearer that on the cornea, and diminishes in size, showing that with the advance of the lens there has also taken place an increase in convexity by a shortening of radius of curvature.

This change in the lens is the only change which occurs in the dioptric system of the eye in the act of accommodation, since it has been proved—firstly, by Dr. Knapp, that this change is mathematically sufficient to account for all the phenomena; and secondly, by Professor Donders, that where the lens is absent there exists no trace of the power of accommodation.

The next question naturally in order is, by what mechanism is this change effected?

And here science can thus far give but a partial answer, since the field of surgery is as yet only limited by exclusion, not accurately and definitively settled. It is now believed that the ciliary muscle is the agent whose contractions cause the increase of convexity in the lens in the act of accommodation; but there are many questions connected with this subject to which no accurate reply can yet be made.

Professor Donders gives four grounds for his belief that accommodation for *near* objects alone is active, while that for distant objects is purely passive. They are these:

1. The subjective sensation mentioned above.
2. The phenomena produced by mydriatics, as sulphate of atropia, whose action temporarily destroys the power of accommodation for near objects without disturbing the perception of distant objects.
3. The phenomena attending paralysis of the third pair of nerves, similar to those produced by mydriatics in this respect.
4. The elasticity of the lens substance.

In order to compare the power of accommodation of different eyes, two points of vision are recognized—that of the most remote distinct perception called the "far point," and the nearest point of distinct vision called the "near point."

The "range of accommodation," that is, the interval between the near and far points, varies greatly in different individuals, and in the same person in proportion to age; and in respect of this "range," Donders points out three classes, in one or the other of which all eyes not diseased may be placed, although the distinction of these classes is in the first instance founded not on accommodation, but upon the power of refraction of the eye in a state of rest.

The eye which, in a state of rest, can bring parallel rays to a focus upon its retina, is called "*Emmetropic;*" it has its "far point" at an infinite distance; that is, at a distance so great that rays proceeding from an object at that point may be considered parallel. Its "near point" recedes regularly as age increases, as follows:

At 15 years	it	is	at	3	inches	distant.
" 25	"	"	"	4	"	"
" 35	"	"	"	6	"	"
" 50	"	"	"	12	"	"

The "myopic" or near-sighted eye has its near point corresponding to that of the emmetropic eye, but its far point is nearer; that is, the myope cannot focus parallel rays upon its retina, but all objects must be brought near enough to give off divergent rays.

The "hypermetropic" eye has its far point *beyond* infinity, while its near point is farther removed than that of the emmetrope or myope; that is, the hypermetropic eye cannot bring parallel rays to a focus upon its retina, but its focus is *behind* the retina, and all rays must be convergent before entering the eye, in order to unite upon the retina. To recapitulate briefly, viewing the eye at rest as a single lens—

The "emmetropic" eye brings parallel rays to focus *upon* its retina.

The "myopic" eye brings parallel rays to focus *before* its retina.

The "hypermetropic" eye brings parallel rays to focus *behind* its retina.

Presbyopia is a term applied to the condition of the emmetropic eye after its near point has been removed, by increase of age, beyond eight inches. It is not to be confounded with hypermetropia, nor contrasted with myopia, since it is a normal state of a normal eye in advanced age, and consists solely of *diminution* of a previously existing range of accommodation, referable mainly to a change of consistence in the lens, while the other two are not changes, but original anomalous conditions of the eye itself.

Myopia and presbyopia are easily recognized, and their study is much more simple than that of hypermetropia. The power of accommodation is so great as almost always to conceal a great part of any existing hypermetropia, and sometimes to mask it altogether; but by the use of mydriatics this faculty may be completely paralyzed, and then the whole extent of the hypermetropia is revealed. In accordance with these facts, hypermetropia is divided into "latent" and "manifest;" the latter term being applied to that degree which is recognizable in spite of all attempts at accommodation, the latter to that which appears only after the paralysis of accommodation has been effected.

In consequence of the fact that by constant excessive use of accommodation, hypermetropia is rendered almost wholly latent, its presence is often unsuspected both by patient and physician, and thus both the explanation and relief of distress-

ing symptoms due to this disturbance are not found. Such a constant exercise of the highest degree of accommodation brings on pain in the ciliary and supra-orbital regions, and causes the eyes to become "tired," "weak," or "overstrained," small objects becoming blurred and confused after continued use of the eyes upon them. As in myopia, the only remedy is in the use of glasses, but the proper selection of them is in this case a much more difficult and delicate task.

THE BEST METHODS OF EXPEDITING NATURAL LABORS.

By W. H. DAVIES, M. D.

I do not propose in this paper to allude to those cases where, from want of pelvic space or undue development of the fœtal head, it becomes necessary to resort to instrumental delivery; but to a class of cases at all times trying to the patience and demanding the nicest judgment and discrimination on the part of the accoucheur—cases where, from inertia-uteri, rigidity of the os, or want of frequency and force in the uterine contractions, labor may be indefinitely delayed. The agencies at our command are so numerous and varied, that we are often in great perplexity as to the choice we shall make in each particular case. They may be classed as remedial and operative. Of the former, ergot, opium, tartar emetic and borax are highly esteemed; while of the latter, mechanical dilatation, the warm water douche, scarification of the cervix, venesection, etc., are each applicable under certain circumstances. First among the remedial agents that has long been held in high repute, stands ergot; which although usually effective in producing the requisite amount of uterine contraction, and generally a safe agent as far as the mother is concerned, provided there be sufficient pelvic space, yet we must bear in mind that more children are lost by it than by any other method, and that the nicest judgment is necessary in the selection of cases for its administration; and it must not be forgotten that it is to a large extent an uncontrollable remedy. Borax has been found in Germany of great use, and when combined with ergot is sometimes satisfactory in its action. Opium in many cases is a powerful uterine stimulant, and has the merit of being a safe one; but the best effects in the majority of cases will be obtained from the judicious use of tartar emetic. This remedy will always be found of the greatest service when the os is dry, hot and rigid, while at the same time the pains are severe and regular, but producing no advance of the head. Given in doses of from one-sixth to one-eighth every fifteen minutes until nausea and vomiting are procured, it will rarely be found to fail in producing free dilatation of the os, copious mucous discharge, and regular effective pains. Of course cases will sometimes occur where its use is contra-indicated, but for general service we possess no remedial agent so steadily reliable. Patients will constantly be met with who have strong objections to the use of any medicinal agent; in fact, where any or all of them would be unsuitable, and where operative interference becomes necessary. When we have any suspicion that the inefficiency of the pains depends on intestinal disturbance, a copious enema must be administered, which alone often suffices to procure effective pains; venesection has often been resorted to with marked good, and scarification of the cervix has its earnest advocates. Of all the operative methods, none so recommend themselves to my mind as most generally safe and effective as the warm cervical douche and Dr. Barnes' water bags. The cervical douche is a remedy always at hand, easy of application, pleasant to the patient, while at the same time it is never attended with any untoward results, and when perseveringly applied to the os and cervix will seldom disappoint. In Dr. Barnes' bags we possess a much more powerful dilating agent, one requiring considerable tact in its application, but ever reliable. A small sized bag should be first used, carefully introduced within the os, dilated with water until it becomes fairly wedged, and there allowed to remain until it drops out, when a larger size may be substituted if necessary, and it will seldom be necessary to use a third. The os, under this process, becomes thick, soft and dilatable, and a profuse mucous discharge bathes the surrounding parts, while the pains increase in strength, regularity and expulsive power. The careful accoucheur, if possessed of nice discriminating judgment, will never be at a loss in the bed-chamber if he is armed with tartar emetic, a syringe and Dr. Barnes' bags, and it will be found that the termination of most cases can be so nicely arranged as to reflect great credit on the attendant and afford vast satisfaction to the patient.

ALCOHOL AS A DRESSING TO SURGICAL AND TRAUMATIC WOUNDS.

By W. F. McNUTT, M.D., M.R.C.S.E., L.R.C.P.E., etc.
Late Surgeon U. S. N., Visiting Physician to S. F. Dispensary, etc.

The treatment of wounds by the local application of alcohol has at least the dignity of age as a recommendation. As a dressing to wounds, it was used in some form by Hippocrates, Galen, Percy, Ambrose Paré, etc., etc. But, at the present time, it may be said to have fallen into general discredit, or at least into general disuse, as a remedial agent for the dressing of wounds. However, it is still held in the very highest esteem by some of the masters of surgery, both in their private practice and in their hospital wards.

In 1864 and 1865, I followed M. Nélaton in the wards of l'Hospital des Chinque, where he uses this dressing, to the exclusion of all others, to incised and traumatic wounds and suppurating surfaces, from whatever cause. His wards were nearly free from the heavy, disagreeable odor so common to surgical wards. Wounds granulated with but very little pus; and pyæmia, so common in Parisian hospitals, was almost never seen. I have used it before and since that time with equally satisfactory results. I am led to believe that the reason why alcohol is not used more extensively as a dressing to wounds at the present time, is not because surgeons have tried it and abandoned it, but because they have not given it a trial. We hope that, by calling the attention of the profession to its well known advantages, some at least will be induced to give it a trial.

M. Nélaton mostly uses brandy with a little camphor dissolved in it, and diluted to suit the requirements of each case. As alcohol is absorbed when applied to denuded surfaces, it is necessary to dilute the solution according to the size of the denuded surface, and to the susceptibility of the patient. I have seen a patient quite intoxicated from the absorption of brandy that had been applied as a dressing to a very large suppurating surface. When a wound shows, by its pale-looking granulations, that a stimulating dressing is demanded, and the general state of the system also requires stimulating, the form of alcohol used may not require any dilution. I have used whisky pure or diluted, but prefer alcohol, diluted as occasion may require, with camphor-water. Though M. Nélaton mostly used "eau-de-vie camphrée," I do not know as he considered the camphor a very important addition to the alcohol. The camphor, however, would seem to be of very good service as a local stimulant and disinfectant.

Alcohol, when applied to a recent wound, incised or traumatic, coagulates the soluble albumen on its surface, corrugates the tissues and contracts the open mouths of the capillary and lymphatic vessels. By sponging the flaps with this dressing after amputation, for from fifteen to thirty minutes, before bringing them together, and by applying some charpie saturated in the same along the edges of the wound, after they have been brought together by sutures, we have given them the very best possible chance to adhere by first intention. Instead of bringing together two soft, oozing surfaces, which are almost sure not to adhere by first intention, we have, by the action of this alcoholic dressing, corrugated and contracted the tissues and vessels, and coagulated the albumen, so that the two surfaces, when brought together, are almost sure to give primary union.

In cases of ablation of tumors and of incised or traumatic wounds, where it is proposed to bring the edges together by sutures, we treat them exactly as we do the flaps after amputation, sponging the cavities or the wounds with the alcoholic dressing for from fifteen to thirty minutes before bringing them together with sutures, in order to prevent the accumulation of blood or serum in the cavity, which would necessarily prevent primary union.

As an application to granulating and suppurating surfaces, alcohol certainly possesses advantages over most other dressings. The indications in such wounds being to promote granulations and prevent purulent absorption, we make *sublata causâ lollitur effectus* our surgical motto, and stimulate the wound to granulations, at the same time preventing the purulent absorption, by preventing the formation of pus.

To those who believe that pus is the result of an exudation, and that germs arise in the exudation, which, by a discontinuous fermentation of cells, produces pus, we would say that alcohol destroys pus corpuscles, and therefore prevents their propagation. To those who believe that pus is produced as the result of the proliferation of the tissue—that is, believe that pus is the result of dissolved tissue—we would say that alcohol is an excellent antiseptic, as it preserves so well animal tissue. Alcohol, then, as a dressing applied to suppurating wounds, proves a preventative to pyæmia, by preventing the formation of pus. Then, again, a solution containing alcohol is not as readily absorbed by animal membrane as an aqueous solution. Besides the local effects of alcohol to the wounds, it possesses the advantage of being a stimulant to the general system, by its being absorbed.

M. Nélaton's method of applying this dressing is to saturate charpie in the solution prepared for use, and spread it over the wound. He keeps the charpie covered with oil-silk, and changes it as often as is necessary to keep the charpie wet.

The advantages claimed, then, for alcohol as a dressing to surgical and traumatic wounds, are, that in recent wounds, it coagulates the soluble albumen on the surface of the wound, corrugates the tissues, and contracts the small vessels, thereby preventing the accumulation of blood or serum between flaps or the edges of wounds, which would necessarily prevent primary union.

Applied as a dressing to granulating wounds, it acts as a local stimulant, prevents largely the formation of pus, lessens the chances of the patient's having pyæmia, is an excellent disinfectant, and possesses the advantage of being a stimulant to the general system.

A CASE IN WHICH OVARIOTOMY WAS TWICE SUCCESSFULLY PERFORMED ON THE SAME PATIENT.

By T. SPENCER WELLS, F. R. C. S.,

Surgeon in Ordinary to Her Majesty's Household; Surgeon to the Samaritan Hospital, London, England.

In the forty-sixth volume of the "Transactions of the Medico-Chirurgical Society," a case is published in which I performed ovariotomy, and removed the right ovary of a patient whose left ovary had been removed nine months before by another surgeon. This patient died on the seventh day after the second operation.

In recording that case, I stated that Dr. Atlee, of Philadelphia, had successfully performed ovariotomy upon a patient whose opposite ovary had been removed sixteen years before by Dr. Clay of Manchester. I have since heard that Dr. Frederic Bird has operated for the second time unsuccessfully upon a patient from whom he had removed one ovary fourteen years before. I have not heard of any case in which ovariotomy has been twice successfully performed upon the same patient by the same surgeon, except that which is now submitted to your consideration.

I performed the first operation in the Samaritan Hospital on the 15th of February, 1865. The patient was an unmarried school-mistress, aged 24, who was admitted on the 29th December, 1864. She was feeble, and had a strumous appearance, with a hectic flush on each cheek. Her extremities were habitually cold, but there was neither œdema or varicose veins of the lower extremities. Occasionally she had a troublesome cough, and expectoration was free, especially at night; but there were no night sweats. On percussion, the left side of the thorax was duller than the right, and expiration was a little prolonged in the left lung. Dr. Parson, who examined the chest carefully, thought that there was "no tubercle, unless in small quantities and scattered." The heart's sounds were normal, but the heart was displaced upwards, the apex being felt between the third and fourth ribs. The liver, stomach, and transverse colon were also displaced upwards. The urine was of a low specific gravity, about 1,015; but contained no albumen. The whole abdomen was occupied by an irregular tumor, in some parts of which fluctuation was perceptible.

The patient's parents were healthy; but three of her sisters had died of phthisis. She herself had always enjoyed good health, and had menstruated regularly up to Christmas, 1863. About that time her body began to enlarge without any known cause; pain in *left* side became tolerably constant and occasionally acute. By March, 1864, the swelling was chiefly felt on the *right* side of the abdomen; it steadily increased in size and became fluctuant. In October, 1864, and again in November of the same year, Dr. Robbs, of Grantham, tapped, and on each occasion drew off twelve pints of clear viscid fluid. After her admission to the hospital in December, a little swelling of the left leg was observed. On the 4th of January, 1865, I tapped and removed seventeen pints of fluid. After the tapping, crural phlebitis in the left side increased, and the leg and thigh were much swollen and *very* painful. The heart and liver descended a little, and the general health improved; but the cyst refilled rapidly, and on the 30th of January I tapped again and removed eighteen pints of whitish glutinous fluid, similar to that before evacuated. After this tapping, groups of cysts, irregularly disposed, and evidently adhering to the abdominal walls in some places, were felt filling the whole of the hypogastric region, and on the right of the median line, above the umbilicus, extending nearly up to the sternum.

The uterus was high and to the left side; its mobility was restricted. The os was small and virginal; the tumor was felt to the right side of the uterus, pushing that organ to the left, but the tumor was scarcely below the brim of the pelvis. After the last tapping, the heart beat a full inch lower than it had done before; but the apex of the left lung was duller than the right.

Although the feeble state of the general health, the displacement of the thoracic viscera, and the family history, did not augur favorably for ovariotomy, it was so clearly the only resource, that it was performed on the 15th of February, after consultation with Dr. Routh. An incision was commenced one inch below the umbilicus and carried downwards for five inches; there were extensive adhesions between the cyst and the abdominal wall, above and to the right of the incision, extending to the brim of the pelvis, but they gave way to the hand. Having tapped and emptied a large cyst, and broken down a second within the first, the tumor was drawn out, and a large piece of adhering omentum was separated. The pedicle was three to four inches in length, extending from the left side of a long thin uterus; it was secured in a small clamp, and left outside without traction. There was little oozing from the separated adhesions. The blood was carefully sponged away, but no vessel required ligature. The right ovary was felt to be healthy. The wound was closed by five deep and three superficial sutures.

The patient rallied well, complained of but little pain, and only required but one opiate. The stitches were all removed on the third day; the clamp on the eighth day. The bowels acted for the first time on the thirteenth day, but there had been no uneasiness from the prolonged constipation. She left the hospital four weeks after the operation, and returned to the country in good health.

About twenty-two pints of fluid were evacuated at the operation, and the more solid remainder of the tumor weighed about seven pounds. The following description of this part of the tumor is by the late Dr. C. G. Ritchie:

"The great bulk of the tumor is made up of five or six large cavities, whose dissepiments have been cut through, or torn through, during the operation. The walls of these cysts are from half an inch to two inches thick, but they owe their thickness entirely to the presence of innumerable vesicles; some of which are the size of a pea; others that of a pippin. The vesicles are for the most part diaphanous; but in almost every one of them is to be observed a white streak, which examination shows to be contained in the jelly-like contents, and not in the translucent wall. Some of the cysts, instead of being diaphanous, are quite white; the fluid contained in these has much the appearance of milk. Some of the cysts are set so closely together that they considerably modify the shape, the one of the other; others again are solitary and spherical. The outer tunic of the tumor is of course peritoneal; it is marked with traces of inflammatory adhesion. The remains of the pedicle consist of a double layer of broad ligament, of the ovarian vessels, and the fallopian tube."

The patient remained extremely well for more than a year after the first operation. On the 14th February last she wrote me as follows: "A year having elapsed since my operation, I am thankful to tell you that I am quite strong again, and have never taken any medicine since I left the hospital. I am a wonder to myself, when I consider how dangerously ill I was." I did not hear of her after this till she came to town and called on me, on the 6th of August, when I found a semi-solid tumor of the right ovary, reaching up to the false

ribs on the right side, in the centre to two inches above the umbilicus, and extending towards the left side half way between the umbilicus and anterior superior spine of the ilium. The uterus was freely movable. She said she had not noticed any increase in size for more than a month, but had felt pain in the right side in the spring. The catamenia had been regular till a month ago, but latterly had become scanty. At the periods in April and May, dysmenorrhœal pain was excessive. There was some cough, but no very urgent symptoms, and she returned to the country to consider my advice, to submit again to ovariotomy before her general health became seriously impaired. About a fortnight later, on the 24th of August, her sister wrote to tell me that the patient's cough had become very troublesome, and she was so much weaker, and generally so much worse, that if she continued to lose her strength she would not be able to go through the operation. As the Samaritan Hospital was closed for repairs, a room in the neighborhood was procured, and the patient came to town on the 29th of August. The tumor had grown very rapidly; dyspnœa and cough were very troublesome; temperature in axillæ 101° Fahr., and urine scanty. She had begun to perspire a great deal at night. The catamenia were expected in ten days. Careful examination of the chest failed to detect anything not explicable by the displacement upwards of the diaphragm by the ovarian tumor, which just reached the ensiform cartilage. As there was no cyst large enough to tap with the hope of obtaining even temporary relief, I performed ovariotomy the day after she arrived in town, the 30th of August, 1866, just eighteen months and a half after the first operation. Professor White, of Buffalo, United States, and Dr. Hjort, of Christiania, were present. I was assisted by Dr. Bowen and Dr. Wright, and Dr. Junker administered chloroform. Bearing in mind the slow and imperfect union in my former second operation, when I made the incision very near the cicatrix of the first operation, I made it in this case an inch and a half to the right of the cicatrix, (which was exactly in the middle line), and carried it from one inch above the umbilical line downwards for five inches. Its lowest point was about half an inch higher than the level of the lowest point of the cicatrix. Three arteries, one of considerable size, were divided near the lower end of the incision, beneath the divided muscle, and were tied before the peritoneum was opened. A thin-walled compound cyst was closely adherent all over its anterior surface, but the adhesions yielded readily to my hand. I introduced a large trocar, but the cysts were too small and the contents too viscid for any fluid to escape. I accordingly opened the tumor, broke it up inside, pressed out a great deal of its viscid contents, and then withdrew the remainder, after separating a piece of adhering omentum. A broad thin pedicle extended about two inches from the right side of the uterus. The uterus was in its normal position; but the pedicle of the tumor, removed at the first operation, passed from the left side of the uterus and adhered firmly to the lower angle of the cicatrix, in the middle line of the abdominal wall. The pedicle of the tumor about to be removed was enclosed in a broad clamp, and the tumor was cut away; three omental vessels were tied; and the ligatures cut off short. There was very little bleeding; but, as some ovarian fluid had escaped, the peritoneal cavity was carefully sponged out. The pedicle on the left side interfered a little with this process, but it was continued till the sponges came quite clean, from the lowest parts of the space between the uterus and the rectum. Finding that there would be considerable traction on the uterus and broad ligament, if the clamp were kept outside, I determined to apply the actual cautery and burn off the portion of cyst left above the clamp, and be prepared to tie any vessel which might bleed on removing the clamp. Protecting the abdominal walls by two shields of talc—a most perfect non-conductor of heat—I used three or four hot irons, and as on separating the blades of the clamp there was no bleeding, the compressed and scarred pedicle was allowed to sink into the pelvis. The wound was closed by silk sutures. The fluid or jelly-like substance, removed with the fragments of the broken-up tumor, together measured eighteen pints. The following description of the tumor is by Dr. Junker: "The tumor consisted of an oblong mass, divided by delicate fibro-membranous septa into numerous chambers, or loculia, of various size. These septa, as well as the main wall, were exceedingly thin and friable; so much so that the tumor broke up into fragments on very slight pressure. Some portions of the main wall and of the septa are very vascular, and covered with what appeared to the naked eye circumscribed round, or oval, red spots; having diameters varying from one to three lines. Under the microscope, however, these spots proved to be a dense capillary net-work, with well-defined abruptly-terminating outlines. The interior of the loculi was in many places coated by a true tubercular deposit, often corresponding in size and situation to the red spots just described. In other places the tubercular exudation was more profuse, and some of the lesser loculi were entirely filled by yellow tubercular masses. Genuine tubercles, softening, or in a state of cretification, (Verkreidung, of Rokitansky,) were also found imbedded in the stroma. In some places the septa were softened or destroyed by the tubercles. The loculi were filled with a thin reddish, or yellow, slightly ropy, fluid; which, in some of the chambers, appeared more turbid from the presence of minute tubercles suspended in the fluid."

The progress of the patient, after the second operation, was quite as satisfactory as after the first. There was rather more pain and sickness during the first thirty-six hours after operation, and three opiates were required during the first twelve hours. After the second day all unfavorable symptoms ceased, and she made a most satisfactory recovery. On the second day I left town, and Dr. Junker carried on the after treatment; he removed the stitches on the third day. The wound was well united, but there was an appearance of commencing suppuration around the ligatures left on the superficial vessels. There was no more sickness, and the cough had entirely disappeared. On the sixth day there was some purulent discharge beside the ligatures, but it ceased on the ninth day, when the ligatures came away. The bowels acted on the twelfth day; the pulse, respiration, and temperature by that time having reached the normal standard. Before the operation, the pulse was 108; respiration, 20; temperature, 101.4. The following table from Dr. Junker's notes gives the range on each day after operation, until the bowels acted and the normal standard was maintained:

	Temperature.	Pulse.	Respiration.
Day of operation.....	101.4	112	32
First day after.....	100.4	98	22
Second day after.....	99.5	86	20
Third day after.....	100.4	92	24
Fourth day after.....	99.0	90	26
Fifth day after.....	99.4	88	20
Sixth day after.....	100.2	100	24
Seventh day after.....	99.2	84	20
Eighth day after.....	99.4	78	22
Ninth day after.....	98.8	84	20
Tenth day after.....	98.2	84	22
Eleventh day after.....	99.4	94	24
Twelfth day after.....	98.4	84	22

Morning and evening observations were taken, but only the highest range each day has been given in the above table. The fall in temperature, pulse, and respiration after the operation is remarkable and very unusual. The slight elevation on the third day, before the removal of the stitches, is very common. So is the rise on or about the sixth day, if there is any superficial suppuration about the wound, as well as the rise just before the bowels are relieved for the first time. After the bowels acted, strength was rapidly gained, and the patient returned by railway to Lincolnshire, twenty-nine days after the operation.

Note added November 13, 1866.—I have heard from her twice since her return home. The last letter is dated November 10, 1866. She says: "I think upon the whole I feel as well as I did after my first operation. My voice is stronger; I can sing the upper notes with greater facility than formerly. I can sing from A up to C natural." I was curious to have the range and power of the voice observed after the removal of both ovaries; and it could be done with unusual accuracy in this case, as the patient is a teacher of singing.

Many circumstances mentioned in the history of this case are suggestive of some remarks between tuberculosis and ovarian diseases; but this subject is of too much importance to be treated incidentally, and I shall therefore conclude by a few remarks upon the comparative frequency of the disease in one or both ovaries, and on the appearance of disease in one ovary after the other has been removed.

Some writers on ovarian disease have asserted that the right ovary is much more frequently diseased than the left, and that co-existing disease of both ovaries is extremely rare. But, on examining the grounds for these assertions, we find that they are principally based upon examination of patients during life, or patients who have not been submitted to ovariotomy.

When we come to examine the results of post-mortem examinations, we find (as a very little reflection would lead one to expect) that, as there is no anatomical or physiological reason why the right ovary should be more frequently affected than the left, so, in fact, one ovary is found to be diseased as often as the other.

Of eighty cases collected by Dr. West from Scanzoni, Lee, and his own notes of post-mortem examinations, in twenty-eight the disease was on the right side; in twenty-six on the left side; and in twenty-six both ovaries were diseased—so that in about one-third of the cases both ovaries were diseased. In 1865, Scanzoni again drew attention to this subject in the Würzburg *Medicinische Zeitschrift*. In a paper on the "Relation of Disease of both Ovaries to the Ovariotomy Question," he gives the result of an examination of the reports of post-mortem examinations for the previous fourteen years, by his colleagues Virchow and Förster. These records were examined with the sole object of ascertaining in how many cases one or both ovaries were diseased; and in ninety-nine cases of ovarian disease, it was found in forty-eight one, and in fifty-one both ovaries were diseased; so that in more than half the disease was on both sides. The tendency to disease of both ovaries appears to be greater before the age of fifty than in older women. Of fifty-two women under fifty, both ovaries were diseased in thirty-one; one ovary only in twenty-one—fifty-nine per cent. to forty. Of forty-four women above fifty, both ovaries were diseased in seventeen only; while one ovary was diseased in twenty-seven. Thus, under fifty, we had both ovaries diseased in fifty-nine per cent.; above fifty, only thirty-eight per cent.

But it must be remembered that any conclusion drawn from post-mortem examination would, in all probability, differ very widely from results observed in ovariotomy. The first series of facts shows what may be expected when ovarian disease has proceeded to its natural termination, or has only been modified by palliative treatment. The other series shows what may be expected when the patient is subjected to radical treatment before the disease has advanced to its latest stages. All observation tends to the conclusion that disease begins in one ovary, and advances to a considerable extent in that ovary before the other is affected, and that in about half the cases it proceeds even to its fatal termination without any disease occurring in the opposite ovary.

If, then, in only about half of the cases where ovarian disease has reached its *latest* stage, disease of both ovaries is found, we might expect that in *earlier* stages of the disease both ovaries would be much less frequently affected; and, so far as my observation has gone, this is the fact. In the first one hundred and fifty cases in which I performed ovariotomy, I only removed both ovaries in seven cases. In three other cases, the ovary not removed presented some indications of disease in a very early stage, but not sufficient to warrant its removal.

It is not improbable that in some of the earlier cases slight disease of the opposite ovary may have been overlooked; but, making every reasonable allowance for such error, it is not probable that, when ovariotomy is performed, both ovaries will be found diseased in more than eight per cent. of the patients. Scanzoni thinks that, as both ovaries have been so seldom removed (he finds only twenty-five on record), operators must have either overlooked disease of the second ovary, or thought it insignificant, or believed that the removal would add too much to the danger. Of twenty-five recorded cases, eleven only recovered, and fourteen died, a mortality of fifty-six per cent.; whereas, of 468 cases, where only one ovary was removed, the mortality was only forty-four per cent.

We require additional facts before we can estimate the increased risk added by the removal of the second ovary. I may just mention that, of the seven cases just mentioned, four recovered and three died.

As to the frequency with which, after successful ovariotomy, the ovary not removed, but examined and found healthy, becomes diseased, besides the case just related, three others have come under my notice.

In my second case, operated on in 1858, the patient remained well for seven years. Then disease of the opposite ovary appeared, so evidently of a malignant character, that no operation was thought of, and soft cancer was found after death.

In the third case, also operated on in 1858, the patient died of peritoneal cancer ten months after operation, and disease had commenced in the remaining ovary, which was enlarged to the size of an apple.

In my forty-third case, operated on in 1862, disease of the opposite ovary came on two years afterwards, and was treated successfully by tapping and drainage through the vagina. The patient is now well. I have not heard of any other of my patients in whom disease of the second ovary has appeared after successful removal of the first.

Sometimes, during an operation, after a removal of one ovary, some slight alteration in the other may be observed, and the question of removal of the second ovary may arise. In more than one of my cases, this question has arisen. In narrating the 112th case of ovariotomy in the first volume of my work on "Diseases of the Ovaries," after recording the removal of the right ovary from a young lady, aged 19, I continued, p. 307:

"The left ovary was enlarged to nearly double the natural size. Two follicles, about the size of cherries, were distended by clot. These I laid open, turning out their contents. * * * The operation was peculiar, on account of the doubt as to the treatment of the left ovary. I resolved, after consulting with Dr. Greenhalgh (who was assisting me), not to remove it, because—

"*a.* The ligature, which would have been necessary, would have added seriously to the risk of the operation.

"*b.* It is not certain that *disease* was present in the ovary, or that it would progress; and if it did, a second ovariotomy could still be done.

"*c.* It seemed hard to unsex a girl of nineteen. Perhaps the clots might have been left alone, but turning them out could do no harm, and might do good."

This operation was performed in November, 1864. This patient recovered well, went into the country four weeks after operation, was married in October, 1865, and is now the mother of a child, born in September last, twenty months after operation, and eleven months after marriage.

The age and conjugal condition of the patient, and the amount of disease in the ovary, must of course be the chief guide to the surgeon in inducing him to leave or remove an ovary in any doubtful case.

When a surgeon has removed a large diseased ovary, and the woman recovers, he has in very many cases the satisfaction of feeling that his patient has been restored to perfect health. Experience has proved that the remaining ovary generally carries on its functions, and that the woman may become the mother of healthy children of both sexes. The patient is not mutilated as by the amputation of a limb, nor does the general health suffer as it frequently does after the greater amputations.

There certainly is nothing like the tendency to recurrence which there is after the removal of malignant tumors; probably by no means so frequent occurrence of disease elsewhere as after successful ligature of a diseased artery, or disease of the opposite lens after successful removal of one cataract, or formation of a second calculus after a removal of one by lithotomy or lithotrity; and certainly no such prolonged suffering as the chronic cystitis, which not unfrequently follows these operations.

The rule is that, by a successful ovariotomy, the patient is restored to a state of health so perfect, that she and her friends are as surprised as they are gratified. But there are exceptions to this rule. In some cases, a disease believed to be innocent proves to be malignant, soon recurs, and proves fatal within a few months or even within a few weeks after apparent recovery. In other cases, the ovary which is left untouched because it is believed to be healthy, or so slightly diseased that its removal is uncalled for, becomes the seat of disease. In what proportion of cases this occurs, we have as yet no means of knowing. It is only within the last ten years that the operation has been performed sufficiently often to furnish data for reliable statistics, and it is difficult to ascertain, even in some of these latter cases, what has been the state of the patient's health for some years after the operation. But it would be unreasonable to expect that in all cases the ovary left in the body would remain healthy. It is for future observation to decide how often, and in what class of cases, a recurrence of the disease may be feared. It is satisfactory, however, to learn that, if the remaining ovary should become diseased, the first operation need not add much to the difficulty of the second, and that of four cases in which a second ovariotomy has been performed, two have proved successful.

The foregoing communication was sent by Mr. T. Spencer Wells to a gentleman of this city, who handed it to us for publication.

CARBOLIZATION IN SMALL POX.

By ARTHUR B. STOUT, M.D.

As variola, with its suite of terrors, is now exciting the public mind, I propose to offer for publication the following suggestions for its more efficient treatment. Without losing time to wait for the confirmation of my views by my own experience, I feel so firmly convinced of the efficacy of the proposed management of the disease, and that success will crown its application, that I do not hesitate to propose its adoption. Although variola is usually propagated by contagion, its original development most probably proceeded from a malarious source. Were its origin in an internal constitutional cause, from some degeneration in the solid tissues of the body, or the circulating fluids, the disease would probably be more confined than it is to individuals whose organic system had become contaminated by the decomposition of retained excretions, or otherwise. There are reasons to show that small pox may exist as an epidemic. Researches as minute as those of Salisbury into the sources of malarious maladies may yet demonstrate the specific nature of the variolous intoxication, and the prediction may be ventured that it will be ultimately determined to be of an origin extraneous to the human body; hence of a malarious character, and originally begotten, like diseases of that type, by absorption through the lungs.

Be this as it may, whether a modification of that form of sporule growth which gives rise to the varieties of malarious disease, or another specific variety of vegetable germination generates variola, or whether the poison is first developed in the human body, the disease, when established, gives rise to emanations from the body which propagate indefinitely the malady; the poisonous effluvia reproduce themselves, and the frightful contagion respects no class of society. Whether these emanations from the skin, from the lungs, from any or all of the secretions or excretions, are of vegetable or animal composition, it is nevertheless they which diffuse the disease.

It is against them, therefore, in the effort to suppress the disease, and at least divest it of its *contagious* character, that my views of treatment are directed.

I am not of those who believe that the small pox must have its definite duration, but, on the contrary, that its course may be shortened. Also, that more may be accomplished in its treatment than simply to mitigate the severity of the attack by relieving the digestive organs, and the use of cooling beverages. The poison which intoxicates the circulating media appears to act like a ferment in the secretions. When its action is once established, it constantly reproduces itself, and thus continuously aliments the disease. It protracts and aggravates the symptoms. When its contagious atoms are liberated from the body, the supply is thus constantly renewed.

If, then, we can find an agent which will destroy this poison, be it animal or vegetable in its nature, and which will promptly arrest its development in its incipiency, surely we may hope to diminish the acuteness of the disease, to shorten its duration, and at any rate to control its propagation.

This agent I believe to be carbolic acid. The prompt and immediate action of this remarkable substance to destroy the vitality of all confervoid growths—all infusorial beings—is known. It not only immediately extinguishes the existing germs, but arrests their future development in the fluids in which it is infused. The minute quantity which suffices for this purpose renders it cheap and accessible for all uses. To sanify hospitals, ships, private dwellings, sewers, and the sick room of small pox patients, it is invaluable. It is by inference from these facts, that I propose to employ it in the active, as well as preventive, treatment of variola.

In conjunction with the use of the Sarracenia purpurea, I feel confident in the hope to establish a new treatment for variola, and put an end in due time to the general horror and fear and desertion from the holiest duties of life, which follow the announcement of small pox.

In brief, then, let the patient be lightly moistened over several times daily with a weak solution of carbolic (phenic) acid. The best mode of application is in the form of solution in tepid water. It may be used with a soft sponge, or better still, with a broad camel's hair brush, such as is used for varnishing, say two inches broad. The brush will pass lightly over the pustules, without disturbing them or spreading the suppuration. As a gentle stimulant, it will accelerate the cure of the pustules. Wherever albumen is present, it coagulates it instantly. After its first use, and the slight infusion of its vapor in the air, giving to the atmosphere a faint odor like that of kreosote, and forthwith plunging all the cast-off clothing into a solution of the acid, I believe that the patient and the apartment occupied will be disinfected. Relatives, nurses and attendants may have immunity from contagion, public confidence may be restored, the necessity for vaccination be less imperative, and, in severe cases, lives be saved, which otherwise, under the moral shock, would be sacrificed. The advantage I have derived from the use of carbolic acid in cutaneous diseases, although not febrile, warrants the anticipation of a good result in hastening the cicatrization of variolous pustules.

As the addition of a few drops of carbolic acid, say ten drops to an eight-ounce mixture, in applications to the throat in diptheria, immediately suppresses the fœtor of the breath, and necessarily destroys all the confervoid germs, as discovered by Salisbury in the saliva, and in diptheritic growths in the throat, so may it be useful when applied to the portal of the lungs, to neutralize their exhalations, and prevent the contamination of the atmosphere. The inhalation of carbolic acid vapor, as it comes atomized from a weak solution in Cologne water, Florida water, or Bay rum, commences the internal carbolization of the system. A sufficient quantity may be thus introduced by the circulation to arrest the reproduction in the system of the variolous poison. A light piece of gauze or mosquito net, saturated with the preparation and laid over the face, will serve the combined objects of a local application, an inhalation, and a purifier of the atmosphere.

Having great confidence in the efficacy of Sarracenia purpurea, I should be unwilling to dispense with its use. The addition of the carbolic acid would not neutralize its action; on the contrary, it would assist the operation of the sarracenia by leaving it less to do, and thereby enhance its merit. The dose being from one-half to one drop of the alcoholic solution, is readily added to any agreeable preparation, or may be given with the sarracenia. The introduction of the acid into the stomach, and its absorption thence into the circulation, would, I believe, sufficiently permeate all the tissues to eradicate the poison, and thus materially shorten the duration, and moderate the virulence of the disease.

The Sarracenia purpurea was introduced to use in the profession in 1861, by Dr. F. W. Morris, of Halifax, Nova Scotia. (See Braithwaite's Retrospect, part 47, p. 21, N. Y. Ed., 1863.) He obtained it from an old Indian woman, who had successfully used it. Several years ago I obtained it in California, and at my instance, Messrs. Keith & Co. prepared the fluid extract, which I used in doses of a teaspoonful every two hours. Steele & Co. have the same preparation still. I addressed Keith & Co., of New York, to prepare the proximate principle sarracenin, but received from that firm a negative answer. It was also provided by me to Mr. H. Webster, who was going as Indian Agent to Washington Territory, and among whose tribes of Indians the small-pox was very prevalent. It was for this object especially that it was desirable to possess the concentrated sarracenin. As Dr. Morris was convinced of the "wonderful characteristics of this plant" in the two first instances in which he used it in 1861, so was I satisfied of its merit in the few cases in which I could see its effects. Why, then, may we not anticipate the most happy results, when with sarracenia and carbolization combined, this scourge of humanity can be assailed.

Carbolic acid was first prepared by Runge from coal tar, and has for its formula, according to Laurent, $C^{12}\,H^{5}O+HO$. This hydro-carbon is now obtained pure in crystals, which are readily rendered fluid by gently heating in hot water, and then adding a very small quantity of water. It requires but about sixty drops of this fluid to a gallon of water, when the water becomes antiseptic to an astonishing degree, destroys animal and vegetable life; applied to plants, kills their parasites immediately, and for these reasons, when sprinkled in the sick room, disinfects it promptly. In using it in variola, the entire body should be moistened several times daily. As it is colorless, and when diluted as above, is not corrosive, all wearing apparel and bed clothing may be washed in it. For this purpose the solution of carbolic acid in alcohol should be added. Alcohol dissolves it in large quantity, and hence as a concentrated tincture it may be kept and diluted to any degree. Allowing the carbolic acid to have been liberally used in all the various modes as here stated, I am confident the apparel of the sick with variola may be worn immediately with safety; their apartments may be visited with immunity from danger; the dread of small-pox hospitals may be relieved; boarding houses and hotels need not be deserted, and variola may be left to the same regulations as rule in other diseases.

DIAGNOSIS OF SKIN DISEASES.

By FERDINAND HEBRA, M.D.,

Professor für Dermatologie an der Universitat, Primararzt der Abtheilung für Hautkrankheitenenun, K. K. Allg. Krankenhause in Wein, etc., etc.

(Translated from the German.)

For the recognition of a disease of the skin, no other assistance is necessary than a knowledge of the objective symptoms, which are to be seen on the surface of the body in every case. No value whatever is attached to either the history or the subjective phenomena in investigating a cutaneous affection; for we must be guided in this matter by those symptoms only which are appreciable to the sight, by the touch, or sometimes the smell. These afford certain and infallible grounds for the establishment of a diagnosis, for they have their origin in the malady itself. They are, so to speak, our alphabet, the letters of which are traced on the skin; and our task is but that of deciphering the writing.

In order to accomplish this, it is very important to have a method of investigating every skin disease, and not to neglect certain rules in examining the cutaneous surface when diseased.

Above all, the whole of the body should be looked at, even in those cases in which the malady is nominally or really confined to one particular part; for it often happens that the appearance of the disease assumes quite a different form, when attention is paid to the appearances presented by every part of the cutaneous surface, from what it would have, if those spots only were examined which were indicated by the patient as its seat. By observing this rule, one is often enabled to find very different and much more reliable grounds for diagnosis of cutaneous diseases than would be possible to be obtained in any other way.

The objection must not be raised, that an examination of this kind, though it may do very well in a hospital, cannot be carried out in private practice, and especially in the case of female patients. It is a great mistake to make this assertion. In the first place, decency should never be disregarded, even in hospital practice; and by us, at least, no procedure is adopted at which decorum and modesty could take offense. There is no need of so conducting an examination of the skin as to cause any discomfort to the patient. The principal parts of the body should be looked at in succession, and in their anatomical order; the genitals and breasts should be left untouched; or, where this is impossible, their inspection should be put off till the last; and then all patients will readily submit to a procedure that is undertaken for their own benefit. Again, full daylight and sufficient illumination are indispensable to the thorough observation of the skin's surface. However brilliant an artificial light may be, and whether it be derived from candles, lamps or gas, it always gives the skin, whether healthy or diseased, a different appearance, and generally makes it look paler than by daylight. Another point, which may be of considerable importance in examining a cutaneous disease, is the temperature of the atmosphere; for both the higher and lower degrees of temperature modify the color of the surface. The ordinary temperature of rooms (66 ° Fah.) is the most proper. For the same reason, one should avoid making the diagnosis of a skin disease, either during or just after the employment of a hot or cold bath by the patient.

Due regard being paid to these considerations, the examination of the case may be commenced, and in doing this, our object is not, as might be supposed, to endeavor to find some real or imaginary *primary efflorescence*, but to keep rather to the *general appearance of the disease*, not allowing ourselves to be led away by any particular symptom, however striking it may be. The following are the chief points that require to be noticed:

I. In regard to the surface of the skin, it must be observed whether this is smooth, soft, even, with a greasy lustre, and free from crusts or scales; or whether it is harsh, ready to crack, uneven, dry, covered with scales or scabs. It has also to be noted whether the natural lines and furrows are too shallow or too deep, too near or too widely separated from each other; what is the condition of the pores of the skin, whether or not they are plainly visible, and whether pervious or obstructed; and lastly, whether the growth of hair is normal, excessive or deficient. For these various circumstances enable us to draw certain conclusions as to the pathological changes in the different tissues which form the skin.

Thus, the healthy integument is smooth and soft to the touch, and has a slightly greasy lustre, and the shedding of its epidermis goes on without visible desquamation. The lines and furrows which exist on its surface are moderately pronounced, and are about a millemetre apart. The apertures of sebaceous and sudoparous ducts, or the cutaneous "pores," as they are called, are at some parts not to be seen, while elsewhere they may be observed as slight depressions, about two millemetres distant from each other. The amount of hair varies with the sex, and also according to the color of the hair itself, but keeps within a certain limit both as regards quantity and quality.

On the other hand, when the epidermis is developed abnormally, the surface of the skin may be rough, uneven, dry, chapped, or traversed by fissures, and covered by scales of various colors and thickness (as is the case in pityriasis, ichthyosis, prurigo, etc.) The lines and furrows, also, may be abnormally deep, and separated from one another by hypertrophic papillæ to a distance of two or three millemetres. Again, the openings of the follicles may be stopped with sebum, and dilated (as in seborrhæa). Lastly, the hairs may fall out, or may be imperfectly developed; or, on the other hand, they may be unusually thick, and may be present in increased numbers.

II. Again, it has to be considered, with reference to the color of the skin, whether the pigment is excessive in amount, or deficient, and whether it is irregularly distributed; whether the surface is abnormally red, either in its whole extent or in patches; or whether, lastly, it deviates from the healthy color in the direction of too great pallor.

Thus, in this respect of the pigment contained in the skin, it has to be noticed whether this is uniformly distributed, or is confined to particular spots, of greater or less extent; whether the pigmentation corresponds to that of the race of men to whom the individual may belong, and to the age, sex, residence and occupation, as well as to the color of the hair, the season of the year, etc.; or, whether there is any deviation from the normal condition in these respects; and, further, as to the intensity of the pigmentation, whether the epidermis has merely a yellow tinge, or is of a brown or dirty black hue. Again, the pigmentation may be defective, either universally or in parts of the surface. And in this case we have to consider whether, besides the partial absence, there is not also at other points, an excess of pigment. Lastly, it is to be observed whether the tracts which present these appearances are bald, or are, on the contrary, covered with hairs of a dark or a white color, corresponding to that of the surface on which they grow.

Now, it is extremely difficult to establish an authoritative standard for the pigmentation of the skin of a healthy person, for this is liable to be modified by many circumstances. But at least this much may be said: that the normal skin of individuals of our own (that is, of the Caucasian) race, generally displays a uniform pale chamois color, and that a darker tint is observed only at certain points, such as the nipple, labia pudenda, and the scrotum.

Accordingly, all *irregular* coloration must be regarded as morbid, whether it be circumscribed or diffused, and whether the skin is darker or paler than it should be, whether bald or covered with hair. This applies to cases of the so-called *Lentigines, Ephelides, Chloasmata, Nævi spili et verrucosi;* and also the Vitiligines, the Achromasiæ, etc.

The same thing may be said also of all colorations and discolorations (*Decolorationes, Dyschromasiæ*), in which there is any considerable deviation from the normal tint of the skin, even though the morbid condition is uniformly distributed over the whole surface of the body.

As to cases in which the skin presents a red coloration, this of course either depends upon capillaries being more or less injected, or it arises from extravasated blood. The pressure of the finger is employed to settle this question. If the redness disappears on the application of pressure, which can of course be ascertained only after the removal of the finger, this is a proof that the blood has not escaped from the vessels, but is merely retarded in its course and accumulated in the cutaneous capillaries. To this condition, as is well known, the terms, *Hyperæmia* and *Stasis* are applied. If, on the contrary, the red spot retains its color without alteration, however forcible the pressure which is brought to bear upon it by the finger, the redness then arises from extravasated blood, and thus the proof that hemorrhage has occurred is established.

Remark—Beyond the determination of this point, namely, whether the reddening of the skin is caused by hyperæmia or by hemorrhage, we derive no further assistance in diagnosis from the application of pressure by the finger. For we have

been unable to find any confirmation of the statement made in almost all medical works, that when the pressure is removed, the reappearance of the red color takes place, sometimes from the centre towards the periphery, and sometimes from the periphery towards the centre. This must either be simply a mistake, or must depend on differences in the form of the surface, and in the mode in which the pressure was applied. For, if a flat, yielding surface, like the inside of the thigh, be pressed on by a hard convex body, such as the finger-tip placed vertically, the centre will, of course, be subject to greater compression than the periphery. Now, the more forcible the pressure on the cutaneous vessels, the longer will be the time required for them to fill with blood. Hence, the redness will appear first at the periphery (which has received the least pressure), and at last at the centre (which was most compressed); in other words, the redness will return from the circumference to the centre. The same thing will occur when a hard convex surface, like that of the thorax, is pressed upon by one which is yielding and flat, or nearly so, such as the pulpy extremity of the finger. And, on the other hand, pressure on a concave surface like the groin, by means of a flat one, will necessarily affect the periphery more than the centre; and in such a case, the redness will reappear in the centre first, and later in the circumference.

III. Attention must next be devoted, in the investigation of cutaneous affections, to the size of the part, and to the thickness and degree of infiltration of the cutis.

Changes in the size of any tract of the skin cannot readily escape observation when looked for, particularly if they are not symmetrical; for we can then always find a standard of comparison in the opposite and healthy side of the body. To ascertain the thickness of the cutis, the best method of proceeding is to raise the skin into a fold, and to compare the transverse diameter of this either with that of the corresponding part on the opposite side of the patient, or on a healthy person. In this way the degree of infiltration of the skin may be estimated also.

IV. Next, and most important for diagnosis, is the appreciation of the appearances produced by the scratching of the patient. One becomes in this way quite independent of the statements of the patient as to the subjective sensations of itching; for no one, who does not really itch, will scratch himself to any extent. And apart from this advantage, an accurate acquaintance with the phenomena to which the irritation of scratching gives rise, affords positive or negative assistance which is of the greatest value in diagnosis. For we know that certain diseases, such as scabies, eczema, prurigo, and urticaria, are always, and that others, as for example, the syphilitic eruptions, are never, attended with itching. And we are thus able to exclude altogether either the one or the other of these groups of diseases.

In order to give an exhaustive description of the excoriations which are produced by scratching, and chiefly by the finger nails, we have to distinguish certain varieties of them according to the degree in which the various tissues of the integument have been injured or have undergone pathological changes, and also according to the intensity presented by these appearances.

Under the first head, we have to remark, that the participation of the papillæ, in the form of hyperœmia of their vessels, is shown by the presence of red striæ, or of diffused redness (Erythema urticans). The follicles also become swollen by exudation in their periphery, and produce elevations above the surface, which take the form of either red papules (*Lichen urticatus*), or of wheals (*Urticaria subcutanea*). Repeated scratching gives rise to exudation on a large scale, which penetrates between the layers of the cuticle. This next becomes raised; vesicles with or without a red periphery or base make their appearance; and an *eczema* is developed. Or, if the contents of the vesicles become purulent, they then form pustules of various sizes, and thus constitute an *ecthyma*.

The effect of scratching on the epidermis is either to lacerate it and tear it to a greater or less depth from its bed—in other words, to produce *excoriations*—or merely to make the shin assume a darker color, from *increase of pigment*.

In reference to these excoriations, we may be allowed to establish three grades of them, which, being produced by the different degrees of force employed in scratching, enable us to draw inferences as to the intensity of the itching. When this is slight (titillatio) the scratching is also inconsiderable, and neither long continued nor often repeated. Hence the most superficial hard layers of the cuticle are alone injured by it, and become detached in the form of mealy dust, or of bran-like scales, from the deeper strata, which still remain adherent. Itching of the second degree (formicatis), on the the other hand, being more intense, leads to a severe and more protracted scratching; and by this the whole of the heavy layer of the cuticle is violently torn from the rete mucosum, of which the red moist surface is exposed. The consequence of this is that the blastema which is poured out by the papillæ for the production of the epidermis, dries into a thin yellowish-brown firmly-adherent scab, just as we see a similar scab formed after the application of a blister. In the third and most violent degree of itching (pruritis), which of course involves an incessant rubbing and scratching, in which great force is employed, not only is the epidermis quite torn away from the corium, but this itself becomes injured. The minute vessels of the papillæ are lacerated; hemorrhage takes place; and by the drying of the drop of blood which is poured out, there is formed a reddish-brown or black scab of a greater or less size.

The phenomena which we have been describing are those which are observed when the scratching is practiced upon a skin which is not diseased. They, of course, present somewhat different features when, simultaneously with the itching, there exists also some other morbid change in the skin. It is scarcely possible to give a general sketch of the morbid appearances which are then produced; but this much may with confidence be asserted, that eruptions that are elevated above the cutaneous surface will always be the first to be attacked, and will often be partially or completely destroyed by the agency of the fingers in scratching, and that the intervening tracts of skin will come in for their turn only when the parts which were covered by the eruption have been brought to a level with the integument. Hence it is explicable that in prurigo, the papules in eczema, the vesicles in psoriasis, the separate red patches, with their coverings of scales, are the points which first show the effects of scratching, although the patient tears away at almost all parts of his skin, without selecting any particular spot.

As for the deposits of pigment, which are the result of scratching, it may be noted that these have a direct relation to the intensity of the itching. This can be most clearly demonstrated in scabies, eczema, and prurigo, in which affections no abnormal dark coloration of the epidermis is at first to be observed. In fact, these pigmentary deposits appear only during the progress of these diseases; they advance with equal step with the increase in the excoriations, and they are to be found only at those parts where the patient is constantly scratching himself.

V. We have now only to direct our attention to the other symptoms, which have not as yet been referred to. Regard must be paid to the form, the number, the arrangement, and the position of the primary and secondary symptoms, which have already been described. We must endeavor to ascertain what pathological process lies at the bottom of the existing cutaneous affection; what injurious influences have been in operation upon the healthy or diseased skin; what are the age, sex, and occupation of the patient; what has been his mode of life; and how he has been fed, lodged, and clothed. Our object must, in fact, be, as we said at first, to take a broad view of the case as a whole. An accurate diagnosis will with much more certainty be arrived at by the investigation of those various points than by searching merely for an accidental primary efflorescence.

ON THE DECOLORIZATION OF TINCTURE OF IODINE.

By WM. H. DAVIES, M.D., M.R.C.S.E.

As much has lately been said and written on this subject, it may not be uninteresting to add a suggestion or two to the store of knowledge already communicated. The methods proposed are so familiar to all, having been fully discussed in late periodicals, that I need do no more than mention them; yet, in my opinion, they do not really give us what we desire. The process by the action of carbolic acid and glycerine has its disadvantages, in being somewhat uncertain, and requiring more time for its successful completion than is desirable; the other process, by the addition of hyposulphite of soda, although undoubtedly hastening the action, in many cases causes a deposit of metallic iodine. The ordinary soap liniment seems to me to accomplish what we wish to attain better than either of these processes. True, it does not actually decolorize the iodine, yet it possesses the great advantage of

enabling us to rub it freely into the skin, without the characteristic color of iodine being imparted to it, and thus we can use iodine as an external application where the antipathies or caprice of patients would otherwise present a formidable barrier to its use, were it employed in the ordinary way. As a liniment, one part of tincture of iodine, one of glycerine, and two of soap liniment, may be used for a long time, without producing much cutaneous irritation, or any characteristic decolorization. Stains caused by the accidental application of tincture of iodine may be at once removed by the use of soap liniment.

California Medical Gazette.

SAN FRANCISCO, JULY, 1868.

☞ *All letters and communications to be addressed to the* "Editor California Medical Gazette," care of A. Roman & Co., San Francisco.

SALUTATORY.

In issuing a new medical journal in this our city of San Francisco—to which, not only the eyes of our own vast continent, but those of the older world, are looking with interest—we deem it our duty in this, our first number, to state the motives which have induced us to commence the undertaking, the principles which will guide us in carrying it on, and the plan upon which our work will be conducted. San Francisco, though yet not a quarter of a century old, contains some 130,000 inhabitants; how many more there are in the State we do not know. In the city and State there are more than a thousand practising physicians. They are a cosmopolitan body, representing not only the best schools of our own country, but those of Great Britain, France, Germany, Italy, and other European countries.

In education, in intelligence, in a zealous desire to advance the science of their profession, and in morality and philanthropy, we are proud to say that these gentlemen rank as peers with that of any other body of professional or learned men.

For some years past, the profession has not been without an organ, in which they could disseminate their opinions, and mutually convey and receive instruction. A medical journal has in fact been published in San Francisco for ten years. From various causes, which it is unnecessary to mention, this journal has never met with cordial support or coöperation from the profession; its career has never met with success. Nevertheless, under varying vicissitudes and many editorial changes, it has lived on—to-day, certainly, brighter and better than at any former portion of its existence. Still, it does not, and never has, worthily represented the profession on the Pacific Coast.

With this feeling, and in the earnest hope and desire to produce a journal that shall be worthy of the medical profession here, and represent it properly abroad, we have been induced to issue the California Medical Gazette; not in any other spirit of antagonism than that of a generous rivalry.

We start upon our enterprize with the full determination to make this an independent Medical Journal. Our only motive—our full confession of faith—is *a desire to advance medical science.* We therefore feel that we have a right to call upon all earnest, hard-working, zealous men in the profession to come forward and help us in our good work. We want from them reports of interesting cases; we ask from them an expression of opinion in any doubtful case of pathology or practice, and we invite them to seek from their *confreres*, through the medium of our columns, the solution of any professional difficulty that may beset them.

We belong to no party—no clique; we cannot be influenced by any—we ignore the existence of any. We have no private end to consummate, we are not actuated by any hope of gain, we do not seek the acquirement of professional capital—in fact, no one connected with the journal will with any authority be known but Mr. Roman, the publisher.

All, therefore, can meet in these pages on neutral ground. Every one animated with a proper professional feeling has something worth the telling. Let us implore Dr. A. not to withhold a communication, because he has seen the name of Dr. B. in our pages; let us assure him that there is no surer way of heaping coals of fire upon the head of a rival than by teaching him something he did not know before; and if, on the other hand, he has picked up a wrinkle from the obnoxious one, let him be consoled with the aphorism, "*Fas est ab hoste doceri.*"

We have not been able to carry out, in its entirety, the plan of our work in this, our first number. As will be seen, the first part will be devoted to original papers.

2. We shall give reports of everything that occurs of interest in the city hospitals; the doings of the Health Office and the Board of Health.

3. Editorials and the medical news of the month.

4. Short reviews of new books.

5. A monthly digest of all the current facts, discoveries, and practical information, that have been given to the profession in the various medical publications of this country and Europe.

We think this part of our journal will be of especial value, presenting as it will to the city physician in active practice, who has but little literary leisure, and to the physician in the country, who cannot have access to these journals, all the current information of the day, and all the new, useful and practical facts of his science.

7. We shall devote a space to correspondence; but we wish it distinctly to be remembered that we insert no anonymous communication. The writer's name need not in all cases be affixed to his letter, but he must send it to the editor as a guarantee of his good faith.

And, lastly, we shall give miscellaneous medical news, or chit-chat of the month.

DOINGS OF THE BOARD OF HEALTH.

The Board of Health have held a special meeting to take into consideration matters of importance as affecting the sanitary condition of the city at the present time. Among other business, the Board passed a resolution ordering the Health Officer to report at the next called meeting the number of cases within the past year in which permits have been granted for interments without the certificate of a physician or the Coroner; also, the number of cases known to the Health Officer in which bodies have been interred or removed from the county without such permits being obtained. A case of alleged malpractice, resulting in the death of a young female, whose body was smuggled away for interment elsewhere, and rumors of other cases of a similar character, doubtless had an effect in inducing the action of the Board. They also sent the following to the Board of Supervisors:

Resolved, That any and all persons in the city and county of San Francisco who may be, or who may become, ill with the small-pox, shall be removed to the Small-Pox Hospital, and that said removal of said person or persons so ill under said disease shall be made at the order of the Health Officer of said city and county, and under such regulations as he shall prescribe, and that the said Health Officer is authorized to make all removals aforesaid.

Resolved, That the Health Officer be authorized to appoint

an additional inspector for one month, who shall be a physician, and whose duty it shall be to inspect those portions of the city inhabited by Chinese, and to attend to cases of small-pox exclusively, said inspector to report to the Board of Health.

The resolutions were adopted, and the Health Officer was then authorized to appoint such an additional Inspector for the period specified. Dr. W. R. Davis has received the appointment.

The Health Officer, in his efforts to abate nuisance and remove the many causes of disease in our city, could be very materially assisted by his medical brethren reporting to him such sources of distemper as fall under their own observation. It is impossible, even with the utmost care and the closest scrutiny, for the Health Officer to become cognizant of all the hot-beds of disease to be found here and there over our large city. But the aggregated reports of the medical confraternity will point out certainly all the important spots that require attention; and in this way the Medical Police of San Francisco can be very much improved, regulated and kept in force.

In many places throughout the southern portion of the city there are houses under which water lies the year round. This becomes decomposed during the summer weather, and malarial diseases of great intensity, insidious pneumonia and rheumatic fever spring up in consequence. These nuisances can be readily abated by physicians notifying the Health Officer of their existence, and we trust our advice on this subject will not be disregarded by the profession.

NOTES OF THE MONTH.

During the past month, many forms of epidemic disease have been very prevalent, both in this city and (according to the various country papers) throughout the entire State of California.

Measles, of a benignant character, we have had for many months, and no district of the city has been exempt. At present, it shows no sign of abatement.

Hooping cough, which has been prevailing through the winter and spring months, offers during the last few weeks but few new cases.

Diptheria has also occurred; though, as far as we have been able to learn, rather in a sporadic than epidemic form.

The medical feature of the month has been the outburst of variola. Up to the end of the month of June, twenty-eight cases were reported to the Health Officer and sent to the Pest House; of these sixteen have proved fatal, and the remaining twelve are reported convalescent. There has been a little flutter of alarm in the public mind, and re-vaccination has to a very considerable extent been had recourse to, not only in private practice, but several hundreds have availed themselves of the services of the public vaccinator at the Health Office.

CURRENT LITERATURE OF THE MONTH.

PRACTICE OF MEDICINE.

PROFESSOR HEBRA, OF VIENNA, AGAINST THE USE OF COUNTER-IRRITANTS.

In an article published in the *Allg. Med. Ztg.* for 1862, No. 49, and reprinted in French, for presentation to the Paris International Medical Congress (*Sur l'Action des Revulsifs*), Professor Hebra declares his opposition to the use of counter-irritants (revulsives), which form so large a part of ordinary medical practice. He professes to show that the theory by which their use was originally suggested and is now maintained, is erroneous; and he brings forward clinical and experimental facts and arguments to demonstrate the evils which result from the practice. Physicians were, he maintains, led to adopt counter-irritants for the cure of internal diseases, by observing the alternations and apparent antagonism of cutaneous affections and internal lesions. When, for example, a patient, the subject of a skin disease (as psoriasis), was attacked by fever, the chronic cutaneous eruption was observed to fade and disappear while the febrile state lasted, but reappeared during convalescence. Again, in exanthematous fevers the febrile symptoms often subside on the appearance of the specific eruption; and, moreover, the eruption continues fully out only under a favorable condition of the internal affection; while, on the contrary, if the internal symptoms are aggravated, the cutaneous eruption diminishes, and, before a fatal issue, becomes altogether invisible. Hence the popular idea among physicians and the laity, that the suppression or metastasis of the cutaneous affection is the cause of the fatal issue of the general disease. But these opinions are erroneous, for the chronic skin disease does not vanish first, to be replaced by the fever; but, on the contrary, the dermatosis only begins to fade after a prolonged continuance of an intense febrile state. In like manner, in every general disease of great intensity and prolonged duration, the anæmia which supervenes is first noticed on the skin, and hence the fading and disappearance of red eruptions in these cases, since even syncope will cause their temporary vanishing. Another erroneous opinion, prevalent from ancient times till the present day, which probably lent support to the use of counter-irritants, was the idea that every disease consisted of something material, which attacked sometimes one part, sometimes another, and which it was the physician's chief aim to eliminate; hence the terms *materia peccans*, acrimonies of the blood, acids, phlegm, black and yellow bile, etc. These notions, in spite of modern pathology, still retain their influence on practice. It is, however, certain, that we cannot judge of the use of remedies on such grounds, but only by a knowledge of the action of the remedy on the healthy body, on the one hand, and an acquaintance with the natural course of disease, uninfluenced by remedies, on the other. This was first stated by Gideon Harvey, in his work, "Ars Curandi Morbos Expectatione, Amstelodami, 1695," where he says boldly that "it would be proper to write on the patient's prescription only the word, *Expecta.*" But this expectant method seemed a neglect too cruel to be practiced in dangerous diseases, until Hahnemann showed that fevers and inflammations were often as successfully treated by decillionths as by the Hippocratic apparatus of venesections and counter-irritation; whereupon physicians and clinical professors, convinced of the real nothingness of decillionths, resorted to the treatment of febrile and non-febrile diseases by the pure expectant method and were thus enabled to study accurately the natural course of disease. Wherever their results were as successful as the older heroic practice pursued "lege artis," it was obvious that the latter was at least unnecessary, that the cure was done by nature in spite of heroic remedies: "Natura et morbum et medicum vincit." Nevertheless, some practitioners, who admit all this in regard to certain diseases, plead for counter-irritants to the skin in the class of affections called *rheumatism*, believing that the peripheral irritation will relieve the deeper seated parts. But how often do these remedies, from simple rubefacients up to the "horrible invention of the moxa," fail; so that where cases improve, it is rather *during* than *by* the treatment. An impartial examination would show that as many rheumatic affections get well under homœopathy, hydropathy, electricity, or the plasters of quacks, as under counter-irritants.

Moreover, the excuse that is necessary to do something to relieve suffering, and that blisters, etc., do no harm, is incorrect, as they often leave indelible marks on the skin, while hot and cold douches, lotions, liniments, and plasters do not, and yet afford as much relief. In diseases of the eye, also, the application of leeches and blisters, which were formerly always used, are now condemned by many opthalmologists. Clinical experiment in Hebra's practice gave similar evidence. Suppose on the thigh of a patient an eczema rubrum of the size of a crown-piece; place at two inches distance on one side a blister of the same size, on the opposite side a sinapism, and at the two other poles, tartar emetic ointment and croton oil. The artificial irritants will produce here bullæ and redness, there pustules and vesicles, but without at all diminishing the intensity of the central eczema. On the contrary, the latter often spreads to and includes the irritated surfaces, and becomes larger than before. Now, if in the same organ or tissue (the skin) a peripheral irritant cannot draw away and dispel a central affection of a similar kind, how can cutaneous irritation be expected to dissipate the

morbid condition of the pleura, lungs, brain, peritoneum, eyes, sheaths of nerves, etc. ? What new path do revulsives open up for the elimination of morbid products deposited in these cavities and organs ? But cutaneous irritants, continues Prof. Hebra, are not only useless, but often do harm, and their pernicious effects may last long, or even put life in peril. It is, for instance, a well-known fact that the exanthemata, small-pox, measles, and scarlet fever, are more fatal in proportion to the intensity and amount of the cutaneous eruption. And experience teaches that the eruption is more abundant on parts of the skin where an irritation or dermatosis (*e. g.*, an eczema) previously existed. A sinapism, applied to the chest on account of dyspnœa, will cause a larger amount of pocks to appear there, and if there were a counter-irritant large enough to cover the entire integument, a simple varicelli might be converted into a fatal variola. Indeed, even the irritation of cold water in excess, applied hydropathically around an eczema, will cause its extension over the whole skin; and often the abuse of acaricidal remedies,—*e. g.*, the sulphur fumigations in vogue a few years ago,—produces a horrible eczema over the whole external surface; often hot baths, pushed by some as an infallible remedy, diffuse instead of arresting a skin disease. The tartar emetic ointment, applied to the scalp in chronic hydrocephalus, causes no diminution of the effusion, while the pustular eruption is very painful, and may give rise to purulent absorption and erysipelas. A blister behind the ear is often the starting point of an eczema which affects the concha, the face, and hairy scalp, and which, under unsuitable treatment, may last for years, causing great pain, as Hebra has often seen, without improving an ophthalmia in the least. Leech bites on the temples are followed by incurable white trangular cicatrices, which certainly are no ornament to a pretty face. The marks of cupping, too, on the neck and arms of women, are often a serious disfiguration. Issues in the arm to prevent relapses of ophthalmia, or of cerebral congestions, or as derivatives from skin diseases, are not only useless for their intended purposes, but are very troublesome and frequently become the source of eczemas which spread over the surrounding integument. Even the discolorations which sinapisms leave behind, entail a lasting defect when applied to the neck or chest in females. Sometimes, indeed, a fatal result may be caused through the application of counter-irritants in typhoid fever, pneumonia, or small-pox, in consequence of the blistered surface being the seat of *cutaneous diphtheria.* The tincture of arnica, introduced by homœopathists, if diluted, as they use it, is harmless; but if applied in a concentrated form, it causes redness and swelling of the skin, which in sensitive individuals develops into an eczema which spreads over a large surface and even the whole skin, and requires months to heal, confining the patient to bed for a longer period and in a worse condition than the affection would have done for which the arnica was administered. Many of these artificial skin eruptions, bullous, vesicular, and pustular, do not cease when the counter-irritant which caused them is removed, but last for weeks, months, or years. They can then no longer be distinguished from the idiopathic skin diseases, eczema, pemphigus, ecthyma, impetigo; and were the common theory true of the protective influence of counter-irritation, these skin diseases ought to afford a security against internal diseases in proportion to their amount. In that case, no persons should be healthier than the subjects of general chronic pemphigus, which should afford means of eliminating all kinds of peccant matters from the system. On the contrary, however, experience teaches that exudative eruptions covering large surfaces, especially in the form of vesicles, blebs, or pustules, not only exhibit no preservative power, but the reverse, exerting a disastrous influence on the general health, and becoming a frequent source of fatal issues. *Lazarus* was always regarded as a collection of all kinds of diseases, requiring providential intervention for his cure !—Veterinary art exhibited similar prejudices till a few years ago. Diseased animals, especially horses, used to be tortured with all kinds of cauteries and corrosives; and farriers were in repute with the ignorant in proportion to the cruelty of their treatment. But thanks to the heads of the medical department in the Veterinary Institute of Vienna, such practice is now obsolete there, and results equally satisfactory are now obtained by the expectant method as were formerly got by those cruel manœuvres. Veterinarians, in this respect, according to Hebra, might serve as a model for physicians. "It would be desirable," he says in conclusion, "that every physician, before applying a counter-irritant to his patient, should ask himself the question, whether, if he were ill, he would treat himself in the same way? Indeed, it has rarely happened to me to see physicians who would have subjected their own persons to the application of issues, moxas, and setons. Yet, let not the physician forget the commandment, 'Do not that to others which you would not have done to yourself,' when, at the bedside of his patient, he finds other remedies unavailing, and is tempted to have recourse to epispastics as his last resort. He ought always to remember that his mission is to relieve pain, and wherever his attempts to do so fail in spite of all his efforts, he can console himself with the assurance that he has at least caused no superfluous suffering."—*From November number of Edinburg Medical Journal.*

The above is a very full abstract of Professor Hebra's views on the use of counter-irritants. The article is entitled to great consideration, on account of the acknowledged ability of its author, and its startling antagonism to the ordinary ideas on the subject.

PROFESSOR J. H. SALISBURY ON TWO NEWLY DISCOVERED SKIN DISEASES.

Dr. Salisbury describes two new skin affections which are both cryptogamic and contagious, and capable of being transmitted from the animal to the human body. He names them *Trichosis felinis* and *Trichosis caninis.* The first originates in the cat, and is produced by a species of fungus that develops in the fermentation of cat's milk. It is readily transmissible to the human subject, and in infants and young children it spreads rapidly, attacking all parts of the body alike, but shows a preference for the hair follicles. The spores and filaments of this growth resemble those of *Trichosis furfuracea,* but develop themselves much more rapidly. The patches are slightly elevated above the surrounding surface, red, and covered with scales, and there is considerable irritation and itching of the parts. The best remedy is the tr. ferri chloridi, which should be painted thoroughly over the eruption, and a single application will most generally destroy completely the vegetation, and effect a cure.

Trichosis caninis affects dogs, and is characterized by an eruption, which begins by a small pustular elevation covered with epithelial scales; other little pustules appear around this, and beyond these others soon arise. Circular and oval patches are thus produced, and may extend over all parts of the animal. It resembles *Trichosis felinis,* but it has not yet been determined whether the two diseases may be produced by one and the same cause. *Trichosis caninis* is transmissible to the human subject, but is much less readily communicable than the first-mentioned disease. The same treatment is necessary for this as for *Trichosis felinis.*—*American Journal of Medical Sciences,* April, 1867.

Fresh evidences of the beneficial effects of bromide of potassium in nervous diseases, especially in epilepsy, are constantly coming to light, and the following communication speaks for itself :

BROMIDE OF POTASSIUM IN EPILEPSY.

M. Namais has communicated a note to the French Academy on the therapeutic employment of bromide of potassium in epilepsy. His experience confirms and extends the statements that first emanated from the Edinburgh school of the benefits of this method of treatment. Fifteen grains thrice daily was usually given by this physician; but on one occasion so large a quantity as 220 grains was administered in twenty-four hours. By this, however, delirium and inability for movement were caused. The employment of the drug had therefore to be suspended; but during this suspension the epileptic fits became again frequent and severe, and only diminished on a return to this remedy, in more moderate doses. *Comptes Rendus,* 20th May, 1867.

Recent investigations have shown that the paralytic symptoms of such an overdose as M. Mamais administered are among the physiological effects of bromide of potassium. M. Laborde has made a most extensive series of experiments, from which he concludes that this substance has no special action on the encephalon, heart, muscles, or nerves; but that it mainly influences the spinal cord, and that by suspending its reflex functions.—*Comptes Rendus,* 8th July, 1867.

Eulenburg and Guttmann have also found that paralysis is the most prominent symptom of a large dose, and they agree with Laborde in ascribing this paralysis to an action on the spinal cord.—*Centralblatt,* 18th May, 1867.

ON THE ACTION AND USES OF PHOSPHATE OF SODA IN SMALL DOSES.

By Wm. Stephenson, M.D., Extra-Physician to the Royal Hospital for Sick Children.

Phosphate of soda is described in our books on therapeutics, in an almost stereotyped form, as a mild saline aperient, well adapted for females and children. Its action is such, however, only when given in large doses, and in the present day it is but rarely prescribed. Dr. Routh, in his work on "Infant Feeding," recommends it on other grounds. It is an important salt in the animal economy, and one often sadly deficient in the food of children. A further reason for its use he bases on the experiments of Dr. Marcet, who first pointed out that the fatty acids are converted into an emulsion by its agency, and that they thus may become more easily assimilated. This is certainly a point deserving of more attention at the hands of medical men than it has received. Further than this, I have not found any special therapeutic action ascribed to it when administered in small doses. That it has such, however, it is the object of this paper to show.

My attention was first drawn to it by seeing it frequently prescribed by my colleague, Dr. Ritchie, who uses it according to the recommendations of Dr. Routh. The first case I gave it in was for a child, four months old, who was being artificially reared on the bottle, and although healthy in every other respect, was somewhat confined in the bowels, having but one motion each day, copious, but dry and white, exactly like coarse white chalk and curdled milk. A pinch of the phosphate of soda was ordered to be added to each bottle of milk. The result was striking, for the very next day the motions were in every way natural and healthy. I had afterwards several occasions of observing in this child the same action under similar circumstances.

The extensive field for observation afforded me at the Children's Hospital has enabled me further to investigate the matter; and in order to have as few disturbing influences as possible, the remedy was always prescribed alone, the parents being directed to put a pinch of the powder into each article of food the child received: in this way four or five grains were administered each time. The class of cases for which it was ordered were wherever, from an unhealthy character of the motions, the visceral secretions seemed to be abnormal. The first point that became apparent was, that in a great majority of cases where the color of the stools was abnormal the natural yellow appearance was restored. This was the only appreciable result in many cases; but, at the same time, it was observed that some forms of diarrhœa at once yielded to its action. Several cases of chalky motions, similar to the one narrated, have been treated with the same beneficial results; and now, in this disorder, I have entirely discarded gray powder, and rely on the phosphate alone. Thus far an action on the liver is clearly indicated, which becomes confirmed by the result in the following cases of jaundice:

Case I.—Wm. P., a robust child, 4 years of age, was brought to the hospital suffering from jaundice. The skin and conjunctiva were of a deep yellow color. Four months before, he had an attack of scarlatina, and since then he has often complained of pain in the belly, his bowels being more or less deranged, motions sometimes white, never a natural color. Six days ago he turned sick, and vomited for two days; no purging; great thirst. No bilious-looking matter in the vomit. On the second day of the attack his skin was observed to be yellow, his stools white, and urine high colored, staining whatever it touched. Ordered 30 gr. phosp. sod. in his food each day. The next morning his motion was slightly yellow, and water much clearer. On presenting himself the following day, a marked improvement in his color was perceptible, and in a few days he had quite recovered.

Case II.—The notes in the following case were supplied by Dr. Ramsay, my assistant, who attended the child:

On the 1st of February, I was called to visit a little boy of two years of age, whom I found to be suffering from well-pronounced jaundice. The mother believed the jaundice to have been caused by the child's "taking a draw" from his father's tobacco pipe. His skin and conjunctiva were deeply tinged with bile. The urine was of dark porter color, and the stools were pale and clay-colored. He was languid and dull, but complained of no local uneasiness. I ordered him to be fed on bread and milk for a day or two, and to have as much of the phosphate of soda as lay on a three-penny-bit night and morning. At next visit, *i. e.*, on the following day, I found that, having lost the prescription, my patient had had none of the phosphate. He was still more deeply jaundiced than when I first saw him, and the lassitude had increased. Again ordering the phosphate, I left, and did not return till the next day but one. There was marked improvement. The skin and conjunctiva were nearly normal in appearance, the urine was of a natural color, and the stools had regained the appearance of healthy fæces. I only saw him once subsequently, when I found him in perfect health.

Jaundice in children, however, may pass away of itself; too much weight, therefore, must not be placed on such cases. The improvement in these two instances was certainly immediate upon the administration of the medicine, and may accordingly be taken into consideration along with other cases of a different character where the liver is involved.

In children, we find diarrhœa associated with inaction of the liver, as indicated by the uniform white color of the motions. The following cases illustrate this condition:

Case III.—A boy, 3 years and 4 months old; can neither walk nor speak, and was 14 months before he cut his first tooth. He has been very subject to diarrhœa, but looks well, and is not emaciated, although soft in the flesh. 19th January.—Has had diarrhœa for six weeks; motions unaccountably frequent, quite watery, pale white, never yellow, and having a strong smell. Portions of egg have been observed to pass through the bowels; vomits occasionally; has a very poor appetite and great thirst. Ordered phosphate of soda.

24th.—Bowels have been moved only three times in the twenty-four hours; discharges still watery in the morning, but stiff through the day, slightly yellow, and more natural in appearance. He is taking his food better, and has not so much thirst.

2d February.—Bowels still rather loose in the morning, otherwise natural; he has no thirst; appetite good; and he is rapidly gaining strength.

Case IV.—A girl, 18 months old; weaned at 7 months. 10th April.—Has had diarrhœa for two months; six or eight motions each day for the last two weeks; they have been uniformly white in color and very watery; vomits occasionally. Ordered phosphate of soda.

12th.—An hour after taking the powder, the motions became yellow; they are still watery, but only twice in the day. Vomiting continues. To continue the powder, and give pepsine wine after each meal.

17th.—Vomiting stopped; bowels again loose and stools white. The phosphate of soda had not been stopped, but the quantity lessened. Ordered to increase the dose.

19th.—Motions are again healthy in color, and now of a natural consistence.

Case V.—Jane W., aged 16 months; weaned two months ago, and was then strong and healthy. Since that time she has more or less suffered from diarrhœa, but constantly for the last four weeks. The motions are green, white, or yellow, never twice the same, and from five to eight in number each day. Water or tea move the bowels at once, beef-tea and semi-fluid food not so quickly; undigested food sometimes observed in the motions. 15th May—Ordered phosphate of soda.

17th.—Immediately on going home, the mother gave the child a drink, with some of the powder in it, and the bowels were not moved till three o'clock next morning. Yesterday, they were only moved twice; discharges natural in color, with a little green matter. Thirst not so great.

22d.—Improvement still going on; bowels move only once in twenty-four hours; appearance natural.

That the liver in these cases was affected cannot be doubted, and the improvement under the medicine is readily explained by its probable effect on that organ, while they go to confirm still further this ascribed action. In the following case, however, the liver was not so faulty, if we are to judge from color, and accordingly gives rise to other considerations:

Case VI.—Peter B., brought from Leith, aged 3 years. 8th February.—Has been failing in health since December; apparently strong and healthy before. A sinking of the eyes was first noticed; he became less playful; his bowels loose, and the stomach irritable. The vomiting occurred at least once every day, and generally after taking a drink or fluid nourishment; porridge and potatoes were retained. He is greatly emaciated and pale, and so weak that he cannot stand; his neck even seems unable to support his head. He has an incessant thirst, and passes a large quantity of water. His bowels are moved five or six times in the day, and almost every hour during the night; motions yellow and watery, like pea-soup. Ordered phosphate of soda to be put in his food.

13th.—Since taking the powder, the bowels have moved three times in the day (the discharges less in quantity and thicker, of the same yellow color), and only once during the night. He has not vomited. Thirst not abated. He is eat-

ing more, and inclined to take food; can walk about a little.

20th.—Four days ago was seized with a severe attack of vomiting, which lasted for ten hours; his thirst was incessant and the drink immediately rejected. Since then he has improved; the bowels are moved once or twice a day, the motions being of the consistence of porridge, and yellow in color; he is walking about and taking his food well. His thirst, however, is still great, his water is large in quantity, almost devoid of color, with the specific gravity barely above that of water.

The mother refused to allow the child to be taken into the hospital, and as she had great difficulty in bringing the child regularly so great a distance, she was recommended to place him under medical attendance at home. He was last heard of on 6th March; the bowels continued to be natural, and he was taking his food well, but the thirst and polyuria continued the same.

The effect of the phosphate of soda in this case is undoubted; no other medicine was given, and no alteration in diet was made. The question is: How is its action to be explained? There is some reason to fear the child was suffering from some degeneration of the tissues, for, although much improved and the diarrhœa checked, he was evidently far from well, and the polyuria remained the same. Whether this be so or not, he was certainly suffering from malassimilation of his food, which produced the excessive weakness, from which he recovered whenever the digestive tract regained its tone. The dyspepsia, however, was not purely stomachic, but had much more the character of being duodenal. The affection of the stomach was, I am inclined to regard, principally sympathetic; the vomiting took place not after the heavier articles of diet, such as porridge and potatoes, but generally after a drink or fluid nourishment; and, as we shall afterwards see, it is highly probable that the phosphate of soda does not aid the function of the stomach. Regarding the case, then, as one of duodenal dyspepsia, it only remains for us to consider whether the action of the phosphate we have already traced upon the liver is sufficient to explain the satisfactory result obtained from its use. If this view is advanced as the explanation, then we must ascribe to the remedy a property of being more than an excitant to the liver; for, unlike the preceding cases, there was here no deficiency of bile. It is possible the quality may have been improved, but of this we have no means of judging. It is more consistent, however, with the evidence to regard the other organs which participate in duodenal digestion to have been also deranged; and if so, we have then grounds for believing that the good effect of the phosphate of soda is not confined to the liver alone. In what this effect consists, and in what manner it acts, will perhaps be better left untouched, while we content ourselves with the fact that it does so act beneficially.

One point alone I would take this opportunity of referring to—a point I have long suspected, but of which we still require more proof—namely, that it is highly probable that the pancreas participates in some forms of diarrhœa in children. That this organ does secrete large quanties of a watery fluid uncharged with the active pancreatic principles when inflamed, or its action otherwise deranged, has been proved by experiments on animals. It has also been shown that water and fluids greatly excite its action. With this observation I would couple the circumstance frequently to be met with in some diarrhœas, as in that of Jane W. (Case V,) that the taking of fluids, and especially water, is immediately followed by a fluid motion, but solid food is not so quickly followed by the same result. The vomiting, likewise, in the last case, was generally after taking a drink of water.

The phosphate of soda sometimes acts very beneficially, even when there is every reason to believe that degeneration of tissues has taken place. The following case affords a good example:

Case VII.—Andrew M., aged eight years, a very scrofulous child. He has suffered for two years from diseases of the knee and ankle joints, for which the limb was amputated. There is also swelling of one of the wrists, and patches of psoriasis on various parts of the body. Both before and after the operation he suffered greatly from diarrhœa. The motions were exceedingly frequent, copious, fluid, of a very dark color, and strongly putrid odor. Alkalies, iron, logwood, lead, and opium, were severally tried; but, from his extreme repugnance to medicine, none were persevered in, except the lead and opium pills, which soothed and gave him sleep, but only slightly controlled the diarrhœa. The phosphate of soda was then ordered to be put in his food. The very next day an improvement was perceptible; the color became natural, and soon he had but two motions a day, healthy in character, but always soft in consistence. He shortly afterwards died from extensive degeneration of the kidneys. No post-mortem examination was made; but I have no doubt, from the general character of the constitutional affection, that the liver and other organs had undergone degeneration.

The only point which now remains for consideration is, whether the phosphate of soda has any beneficial effect on the function of the stomach. Here a case of failure becomes as instructive as that of success. It was one where I fully expected a good result, and has in it many of the indications for the use of the remedy.

Case VIII.—A boy, about fifteen months old, lately weaned. He was greatly emaciated, had a great thirst and ravenous appetite; whenever he saw animal food he would eat it greedily. His bowels were exceedingly loose and frequent by day and by night, the motions being of a very dark color and strong odor. There was no vomiting. The phosphate was given, with no change further than a slight improvement in color. The food was carefully regulated and changed, astringents and iron were tried, but he remained in the same condition for some weeks. Pepsine wine was then ordered, and in a few days a marked change was perceptible; his bowels gradually recovered their tone, and he steadily gained in strength.

Not to multiply cases unnecessarily, I may state that I have frequently observed that where the stomach was weak, and vomiting of food existed, that the latter symptom often persists after the use of the phosphate, even when its beneficial effect on the bowels has been obtained (see Case IV), and that then pepsine is of service in restoring tone to the stomach. I believe, therefore, that the phosphate of soda has no action upon gastric digestion.

Hitherto I have illustrated the action of the remedy in children only; but it is not limited to that age alone. I have obtained good results in cases of adults also, where the action of the liver was faulty. One only would I record here from its remarkable peculiarity, possessing much interest in itself.

Case IX.—Mrs. M., a widow lady of full habit of body, above forty-five years of age, has suffered for some years from irritation in the bowels. During that time, and especially the last six months, she has had three or four fluid motions each day, "as if she had taken a dose of salts in the morning." The color was in general of a dark-brown, often perfectly black, and lately has been occasionally white. Her motions, she says, have never been natural or solid during all this time. Her appetite has been moderately good; she has never been jaundiced, and she has no pain in the region of the liver. Daily, and often several times in the day, she has had severe spasmodic pains in her bowels at irregular times, coming on suddenly, and never leaving until her bowels were moved. She has had a constant short cough, and complains of dyspnœa on slight exertion. She was ordered half a teaspoonful of phosphate of soda, three times a day, dissolved in water, and to be taken after meals. At first, by mistake, she took it only in the morning, and without effect. Two days after taking it as ordered, her motions became solid, and of a good yellow color. Since then she has had but one motion a day—in every respect natural. The spasmodic pain also left, and has since only recurred twice, probably from slight indigestion, and, as before, was only relieved by a fluid motion from the bowels. The cough from which she suffered gradually became less troublesome, and has now entirely left, except upon some slight excitement. She continued the phosphate for three weeks, and then discontinued it. Her bowels have now been perfectly regular and natural for two months without any medicine.

In the selection of cases I have now given, I trust that I have shown that, in this simple, inexpensive, and easily administered medicine, we have a remedy of much value. It may be given continuously to the youngest and most delicate children with perfect safety, and, in so prescribing it, we are giving a salt of the greatest importance to the general economy when absorbed. It promotes a healthy secretion of bile, and of itself can aid in the assimilation of fatty matters. In regarding the cases where it is indicated, one cannot but be struck by the similarity which exists between its action and that often sought by the administration of gray powder in "alterative doses." As a rule for its prescription, I am in the habit of telling my students that wherever their minds suggest the ordering of hydrargyrum c. creta as an "alterative," that they should try first the phosphate of soda. The advantage of the latter over the former, where it has to be continued for some time, is patent to every one. Where the pur-

gative effect, however, is desired, the former is to be preferred. I hope, therefore, that soon the use of the phosphate will displace in many cases the frequent and too often long-continued use of the dangerous remedy.

The cases for which I now recommend it are chiefly the following:

In infants who are being artificially reared, and who are liable to frequent derangement of the bowels; also where the phosphatic elements in the food seem deficient, or where articles of food rich in phosphates, such as oatmeal, disagree; where, from the character of the motions, there is a deficient or defective secretion of bile. It is thus of service in cases of chalky stools or white fluid motions. I have also found it of service in many cases of green stools. In diarrhœa, generally, it is more difficult to distinguish the class of cases. In simple diarrhœa, such as we frequently meet with in the summer months, I have not found it of much service alone, although it may be of use when given in combination with other remedies. It is chiefly in that class of cases which are more properly termed duodenal dyspepsia that it is of benefit. Diarrhœa, after weaning, is generally of this nature, and the cases are often chronic, or of some weeks' standing—the mother generally having exhausted her own and the nearest druggist's resources before applying for advice. It is also of service in some cases where the diarrhœa is due to some general cachexia, as in Case VII.

In adults it has relieved constipation when taken in drachm doses in the morning. I have seen benefit also derived from it where there was a feeling of fullness and sometimes pain in the epigastrium some hours after taking food. In one case of phthisis, the patient said he always felt lighter and better when he took it after his food. I cannot but associate its action with the recorded success derived from the use of the hypophosphite of soda in phthisis; and I am inclined to conjecture that this remedy is to be found beneficial in cases where duodenal dyspepsia is well marked, and that the good results are due to the aid in the assimilation of fatty matter. To theorize, however, is easy, but not always of advantage, and I prefer to leave the matter for further observation.

The doses in which I generally prescribe it are: For children, from four to ten grains in the food; and for adults, from twenty to forty grains dissolved in water, and taken after meals. I have several times observed, that when given in too small quantities, it had not the same effect. Cases IV and IX illustrate this point, so that it is well to begin with a large dose.

A more extended trial of the phosphate of soda in other hands than mine will, in all probability, elicit more exact information as to its action and uses. I have now given the result of two years' investigation, which, though ill-defined and crudely shaped, may contribute to redeem one more remedy from the obscurity into which it had fallen, and restore it to the catalogue of useful substances.—*From October Number Edinburgh Medical Journal.*

PATHOLOGY.

ON INFLAMMATION AND SUPPURATION, BY DR. J. COHNHEIM, ASSISTANT IN THE PATHOLOGICAL INSTITUTE OF BERLIN.

The author investigated the phenomena of inflammation in the cornea of the frog, and found (1,) that it is not true, that the stellate corpuscles enlarge and form pus cells within themselves, either from their nuclei or cell contents; (2,) that corneal opacity depends upon the presence of pus corpuscles within it; (3,) that the pus corpuscles are situated between the cornea corpuscles, and that the former alter their form or position, while the latter do not. From these observations he concludes that pus corpuscles must either be derived from the pre-existing movable lymph corpuscle-like bodies in the cornea, or have travelled into it from without. The latter view he deems correct. He found that simple traumatic keratitis always begins at the margin of the cornea and spreads inwards; also, by adopting Rechlinghauser's plan of coloring the white corpuscles by the introduction of colored solution (Cohnheim used aniline blue) into the lymph sacs, the veins, or the arteries, he satisfied himself that "the pus corpuscles in the inflamed cornea had formerly been white blood corpuscles, and had passed into the cornea from surrounding vessels."

In order to ascertain how these structures escaped from vessels, he experimented on frogs, which he first paralyzed by means of curara (a poison which, given in small doses, does not influence the circulation). He selected male frogs, and, by a particular arrangement, placed the mesentery under a microscope in such a way as not to interfere with the circulation. He found (1,) that the arteries become dilated; (2,) that more slowly, but to a greater extent, the veins undergo the same change; (3,) that the capillaries also become widened; (4,) that with these alterations the circulation becomes slower; (5,) that after a time, in the veins a peculiar change occurs. The layer of the blood stream, next the walls of the blood-vessels, of presenting the natural clear appearance, becomes filled with white corpuscles, which gradually accumulate, and move more and more slowly, until at length they stop; while the red column continues to move in the centre. But presently another change appears. "On the outer contour of the venous wall there appear small, isolated, colorless, bud-like elevations, as if the wall itself were forming small outgrowths; gradually these enlarge. After a time, the half of a spherical body of the size of a white blood corpuscle appears. This, after a time, becomes pear-shaped, the broad end from the apex pointing towards the vessel. From the rounded end numerous little processes project, and the corpuscles assume various forms. Above all, however, the mass separates more and more from the vessel, and at last we see a colourless, somewhat shining, contractile corpuscle with one long and several short processes;" in fact, a white blood corpuscle. This process goes on on many parts of the venous wall, which nevertheless remains intact.

When the capillary current is much impeded, a similar change occurs, but the red as well as the white corpuscles pass out.

The slowness of the circulations, and the accumulation of the white corpuscles, depend upon the dilatations of the vessels. How, in what way, and by what power, do the corpuscles pass out? Cohnheim finds that in the interior of the veins, capillaries, and arteries, there are stomata similar to those demonstrated by Rechlinghauser and Oedmanson in the walls of serous cavities, and that these communicate with canalicular spaces. It is by these openings that the corpuscles pass out. As to the power, he believes that it is by the peculiar amœba-like contractility that they escape.

During these processes he finds the rest of the tissue unchanged; the cells covering the peritoneum are unaltered, even when they are covered with a layer of lymph and pus.

These results, obtained by experiments on frogs, he has verified by examination on young rabbits and cats.

He would thus transfer the seat of pus-cell formation from the connective tissue to lymphatic glands.

In the conclusion of his paper he remarks that it will be necessary, in some degree, to modify the prevalent theories of acute inflammation—at least of that form which is accompanied by suppuration. "For this species of inflammation the vessels again come into the foreground. Without vessels no inflammation, dilatation of vessels, injection, and hyperæmia, the necessary first stage. In vascular parts it is their own vessels, in non-vascular, those of surrounding structures, that supply, as in ordinary nutrition, the plasma; in inflammation the pus corpuscles, as a second requisite for the occurrence of suppuration, necessitate the presence of spaces which permit a moving forward, and an accumulation of colourless corpuscles"—and such spaces are formed by the connective tissue.—*Virchowes Archiv*, Sept.

THERAPEUTICS.

DR. FRASER ON THE CALABAR BEAN.

The following are the conclusions at which Dr. Fraser has arrived as the result of his elaborate investigation:—

A. *Action through the blood.*—1. Physostigma has proved fatal to every animal hitherto examined, with the exception of the Esere moth. In mammals and birds, death is most rapidly caused when the poison is injected into the circulation, or when it is brought into contact with a wounded surface. It follows nearly as quickly when Calabar bean is introduced into a serous cavity; much more slowly when it is exhibited by the mucous membrane of the digestive system. In rabbits, death has been caused by its application to the schneiderian, the auditory or the conjunctival mucous membrane. The skin of frogs resists the poison for a long time; but, if it be applied for a considerable period, and with proper precautions, distinct evidence of absorption may be obtained, though death has never been caused by such application.

2. The contact of the extract of Calabar bean with the gastric juice of a dog, for twenty-four hours and at a tempera-

ture a little above 95° F., did not, in the slightest degree, modify the energy of the poison.

3. A large dose given to a mammal or bird, rapidly affects the cardiac contractions, and then paralyses the heart. The respiratory movements are quickly stopped, but the symptoms and post-mortem appearances are those of syncope. Such a dose, injected into the abdominal cavity of a frog, affects nearly simultaneously the heart and spinal cord, and very rapidly destroys the vitality of both organs. In this case the motor nerves are only slightly or not at all affected, and may retain their conductivity for about thirty hours. Evidence of the vitality of the afferent nerves may be obtained as long as the retained vitality of the spinal cord permits of its diastaltic function being examined.

4. In mammals and birds, an average dose produces symptoms of asphyxia. When administered to frogs, a similar dose impairs the function of the spinal cord, and diminishes the rates of the cardiac contractions and of the respiratory movements; and, soon after, the latter cease. In periods varying from one and a half to four hours afterwards, the motor nerves are paralyzed; this paralysis implicating their endorgans first, and their trunks afterwards. From this it must not be inferred that the nerve is paralyzed by a centripetal progression of the poison; the only fact demonstrated being that a direct ratio exists between, on the one hand, subdivision of nerve substance, facilitating contact of the poison, and, on the other, rapidity of paralyzing effect. Indeed, division of the nerve trunk, previous to the administration of Calabar bean, delayed the paralysis of the endorgans. The afferent nerves retain their activity as long, at least, as the functions of the spinal cord are not lost. The spinal cord and the motor nerves are generally paralyzed at about the same time..

5. When a small, but still fatal, dose of Calabar bean is administered to a frog, the effects are the same as those in the previous conclusion, until they arrive at the stage of paralysis of the motor nerves; after this, an interval of several hours may elapse before the functions of the spinal cord are completely suspended. During this interval the *tactile* sensibility of the afferent nerves is increased; so that, if the ischiadic artery and vein of one limb have been tied before the exhibition of the poison, a slight touch of the skin in the poisoned region, which before the administration of the poison caused no effect, will now produce faint twitches of the limb whose vessels are tied; while an ordinary excitant, such as sulphuric acid, will show everywhere a marked diminution in the diastaltic activity, as measured by the métronome.

6. *With a still smaller dose, a frog may have its cardiac contractions reduced by from seventy to eight per minute, its respiratory movements completely stopped, and the endorgans of its motor nerves paralyzed, and yet afterwards completely recover.* This has occurred when two grains of extract were administered to a frog weighing 730 grains.

7. In frogs, the voluntary muscles are unaffected by the poison, and may continue to respond to galvanic stimulation during three or four days after its administration. The contrast between this and the effect of Calabar bean on the motor nerves, may be well shown by ligaturing the ischiadic vessels of one limb before injecting the poison. If, when strong stimulation causes no reflex movement, the two gastrocnemi muscles, with their attached nerves, be so placed that an interrupted current, from one Daniell's cell and Du Bois Reymond's induction apparatus, may be transmitted simultaneously through either both muscles or both nerve trunks, it will be found in the case of the muscles that, when the secondary coil is slowly advanced, contractions will occur with the same current in both muscles, or with a weaker current in the case of the poisoned than in that of the non-poisoned one, this varying with the length of time which has elapsed since the limb was deprived of blood; when the current is transmitted through both nerves, contractions will be produced simultaneously in both muscles, or with a weaker current in the non-poisoned one, or contractions will occur in the non-poisoned muscle only, this also varying with the length of time that may have elapsed since the exhibition of the poison.

8. In mammals and birds, the voluntary muscles are affected in a very remarkable manner. At an early stage of the poisoning, faint twitches occur, which gradully extend over the body, and, at the same time, increase in vigor so as to interfere with the respiratory movements. Shortly before death, they again become mere successive twitches, often requiring the use of the hand to discover their existence. After death, if a muscular surface be exposed, these twitches will still be observed, involving usually different muscular fasciculi at different times, rarely the whole of a muscle at once; and in mammals they may persist for more than thirty minutes after death. They are caused by a direct effect of physostigma on the muscular substance. This is shown by their continuing after paralysis of the motor nerves, by their persisting in a muscle cut out of the body, and by their non-occurrence in parts that have been separated by ligature from the circulation.

9. In mammals and birds, when the dose is large, the heart's action is rapidly made slower and then stopped. In dogs, it may diminish to one-half in three minutes, and cease in ten. In frogs, also, a large dose, injected into the abdominal cavity, causes rapid and complete cardiac paralysis. A smaller dose causes either a gradual cessation, followed by a renewal at a diminished rate, or a gradual fall from sixty or seventy to four or six beats per minute, followed by a gradual return to a diminished rate of from eight to twenty per minute. At this stage, and for many hours afterwards, the only signs of vitality are this diminished cardiac action and the power of the voluntary muscles to respond to galvanic and other stimulation. In the frog, where alone these last phenomena have been observed, the heart may continue so to contract for three or even five days, provided the temperature of the apartment be as low as 50° F. After stoppage, galvanism may sometimes cause a renewal of rhythmical contractions; but this can rarely be done, and unrhythmical and partial contractions can alone be excited. Cessation of the heart's contractions occurs in diastole, with all the chambers full.

10. The pneumo-gastric nerves retain their inhibitory power over the heart during the whole time from the diminution to the partial recovery of its action. Soon after this, however, they are paralyzed; and this occurs at nearly the same time as the affection of the motor nerves.

11. Division of the pneumo-gastric nerves, or their paralysis by curare, or destruction of the medulla oblongata or spinalis, does not protect the heart from the action of physostigma.

12. The lymphatic hearts of frogs poisoned by Calabar bean soon cease to contract.

13. In rabbits, a large dose paralyzes the cervical sympathetic nerves before the death of the animal. A smaller fatal dose merely diminishes their activity.

14. Before the stoppage of the heart, proofs may be obtained of the vitality of its sympathetic ganglia; but as striped muscle is not affected by Calabar bean conveyed by the blood, we are obliged to infer from the symptoms respectively produced, that the activity of the cardiac sympathetic system is probably destroyed by a large dose, and lessened by a smaller one.

15. The animal temperature, both external and internal, has been invariably observed to rise in rabbits and dogs, but only slightly and for a short period; after which it slowly falls.

16. The condition of the capillary circulation was examined in the web of the frog. Soon after the exhibition of the poison, the smaller arteries and veins contracted slightly; but, after a short interval, this contraction was succeeded by a rapid and permanent dilatation, in which the calibre of the vessels was considerably above their maximum previous to the poisoning. This capillary dilatation appears to occur all over the body, as is shown by a peculiar blue coloration of the voluntary muscles and of the heart, a similar coloration of the serous and fibro-serous tissues, and a congestion of the blood-vessels in the conjunctiva and iris. This change also occurs, in a less marked manner, in birds and mammals.

17. The general results of experiments in which the arterial and venous tensions were examined were, that the arterial tension first diminished slightly, immediately after the administration of the poison, then gradually increased until it reached its maximum, when the number of cardiac contractions had diminished to at least one-half, and afterwards rapidly fell; and that the venous tension began to increase immediately after the administration, continued doing so until it slowly reached its maximum, when the arterial tension had considerably diminished, and then fell, though more gradually than the tension of the arterial system. The number of the cardiac contractions, when the venous tension had attained its maximum, was about one-third of the average before the poisoning; the respirations were rather less frequent than before, and the temperature had risen a few tenths of a degree.

18. Physostigma causes extreme diffusion in the pigment-cells of the frog's skin, and thus a very marked change occurs in the color of the animal during the progress of the symptoms.

19. In dogs, the peristaltic action of the intestines is usually destroyed at death; it may, however, continue a short time afterwards. In rabbits, the intestinal movements are frequently increased in activity before death, and generally continue for a considerable time afterwards.

20. The pupil contracts in all cases of rapid poisoning in mammalians and birds. The contraction may, however, be slight and of short duration; and dilatation may then be observed during the greater portion of the experiment, especially if the dose be a small one. Contraction of the pupil is produced in frogs also.

21. Calabar bean acts as an excitant of the secretory system; increasing the action of the alimentary mucus, of the lachrymal and of the salivary glands.

22. In the frog, the symptoms of poisoning are not materially altered by removal of the brain, or by division of the cervical portion of the spinal cord.

23. Artificial respiration does not prevent death, in mammals, after the exhibition of a poisonous dose. This is a necessary result of the effects of physostigma on both the cerebro-spinal and sympathetic systems.

24. Congestion of internal organs occasionally occurs; but this is by no means an invariable consequence of a fatal dose.

23. The blood is generally dark after death, but becomes arterialized on exposure to the air; its respiratory capabilities are unaltered; it often clots loosely and imperfectly; and, when examined with the spectroscope, the bands of scarlet cruorine are found unchanged. In the rabbit and dog, a microscopic examination demonstrates an invariable change in the colored corpuscles, which have their outlines distinctly crenated. This change is not caused in the blood of birds or amphibia. The white corpuscles remain unaltered.

B. *Topical Effects.*—1. When the poison is applied to the surface of a frog's brain, no effect is produced; but when it is brought into contact with the spinal cord, a few twitches occur in the extremities, followed by paralysis of the portion of cord acted upon.

2. When physostigma is applied to a mixed nerve-trunk, in a concentrated form and with proper precautions to prevent absorption by neighboring parts, first the afferent nerve-fibers are paralyzed, and afterwards the afferent.

3. Topical application destroys the contractility of striped and of unstriped muscular fiber. The heart's action is stopped by repeated application to its external surface or to the pericardium. If a small quantity be injected into one of its chambers, paralysis nearly immediately follows.

4. The blood-vessels are dilated when a solution is applied to the web of a frog's foot.

5. The effects of the application of Calabar bean to the eyeball are a somewhat painful sensation of tension in the ciliary region, contraction of the pupil, myopia and astigmatism; with, frequently, congestion of the conjunctival vessels, pain in the supra-orbital region, and twitches of the orbicularis palpebrarum muscle.—*Trans. Roy. Soc. of Edinburgh*, 1867.

ROGOW ON THE ACTION OF THE EXTRACT OF THE CALABAR BEAN AND OF NICOTINE ON THE IRIS.

Authorities have hitherto ascribed the action of nicotine and the Calabar bean on the pupil to the sympathetic or to the third pair of nerves. Rogow directs attention to the fifth pair as an agent in the contraction of the pupil. He cites the experiments of Bernard, Budge, and others, who found, after division of the trigeminus, contraction of the pupil to follow excitation of the peripheral extremity. With the view of ascertaining the mode of action of the Calabar bean and nicotine, he performed a number of experiments on rabbits, in which he introduced these substances by the mucous membranes, injected them under the skin or applied them directly to the eye, and investigated their action under various circumstances—as while the animal was poisoned with curara, or had its pupil dilated with atropine, after excision of the cervical sympathetic, etc. As the result of his experiments, he is of opinion that the action of the Calabar bean is due to contraction of the circular fibres of the iris, dependent on irritation of the peripheral extremities of the motor oculi, and that there is no paralysis of the sympathetic. The action of nicotine he considers less simple, and that different causes lead to pupillary contraction according to the mode of its introduction. When applied directly to the conjunctiva, the contraction is due to irritation of the fifth alone, or combined with excitation of the muscular fibres of the sphincter. On the other hand, when nicotine is absorbed through the nasal mucous membrane, or after subcutaneous injection, paralysis of the sympathetic branches may co-exist, but the chief agent in the myosis is the fifth pair of nerves. (Annales d'Oculistique, tome lviii., p. 105; from the Zeitsch. fur Ration. Med., b. xxix., h. 1, 1867.)—*From January Number Edinburgh Medical Journal.*

OINTMENT FOR PRURIGO.

Dr. Charvet has found the following a nearly infallible cure for prurigo, after an experience of twenty years:—

Axunge, simple or camphorated, .	60 parts	} Mix.
Citrine ointment, ...	3 "	}

A small quantity of this should be spread in a thin layer over the affected surface, and gives almost instantaneous relief. The dilution of the citrine ointment in this preparation prevents the inconvenient and permanent staining of linen which is otherwise caused.—*Bull. Gen. de Thérap.*, Aug. 30, 1867, p. 180.

SURGERY.

ILLUSTRATIONS OF THE ANTISEPTIC SYSTEM OF TREATMENT IN SURGERY.

By Joseph Lister, F.R.S., Prof. Surgery in University of Glasgow.

NO. I.

Decomposition or putrefaction has long been known to be a source of great mischief in surgery, and antiseptic applications have for several years been employed by many surgeons. But the full extent of the evil, and the paramount importance of adopting effectual measures against it, are far from being generally recognized.

It is now six years since I first publicly taught in the University of Glasgow that the occurrence of suppuration in a wound under ordinary circumstances, and its continuance on a healthy granulating sore treated with water dressing, are determined simply by the influence of decomposing organic matter. The subject has since received a large share of my attention, resulting in the system of treatment which I have been engaged for the last three years in elaborating. The benefits which attend this practice are so remarkable, that I feel it incumbent upon me to do what I can to diffuse them; and with this view I propose to present to the readers of the *Lancet* a series of illustrated cases, prefacing them with a short notice of the principles which it is essential to bear in mind in order to attain success.

The cases in which this treatment is most signally beneficial are divisible into three great classes—incised wounds, of whatever form; contused or lacerated wounds, including compound fractures; and abscesses, acute or chronic—a list, indeed, which comprises the greater part of surgery. In each of these groups our aim is simply to prevent the occurrence of decomposition in the part, in order that its reparatory powers may be left undisturbed by the irritating and poisoning influence of putrid materials. In pursuing this object we are guided by the "germ-theory," which supplies us with a knowledge of the nature and habits of the subtle foe we have to contend with; and without a firm belief in the truth of that theory, perplexity and blunders must be of frequent occurrence. The facts upon which it is based appear sufficiently convincing. We know from the researches of Pasteur that the atmosphere does contain among its floating particles the spores of minute vegetations and infusoria, and in greater numbers where animal and vegetable life abound, as in crowded cities or under the shade of trees, than where the opposite conditions prevail, as in unfrequented caves or on Alpine glaciers. Also, it appears that the septic energy of the air is directly proportioned to the abundance of the minute organisms in it, and is destroyed entirely by means calculated to kill its living germs—as, for example, by exposure for a while to a temperature of 212° Fahr., or a little higher, after which it may be kept for an indefinite time in contact with putrescible substances, such as urine, milk, or blood, without producing any effect upon them. It has further been shown, and this is particularly striking, that the atmosphere is deprived of its power of producing decomposition as well as organic growth by merely passing in a very gentle stream through a narrow and tortuous tube of glass, which, while it arrests all its solid particles, cannot possibly have any effect upon its gases; while conversely, "air dust" collected by filtration rapidly gives rise simultaneously to the development of organisms and the putrefactive changes. Lastly, it seems to have been established that the character of the decomposition which occurs in a given fer-

mentable substance is determined by the nature of the organism that develops in it. Thus the same saccharine solution may be made to undergo either the vinous or the butyric fermentation, according as the yeast plant or another organism, described by Pasteur, is introduced into it. Hence we cannot, I think, refuse to believe that the living beings invariably associated with the various fermentative and putrefactive changes are indeed their causes. And it is peculiarly in harmony with the extraordinary powers of self-diffusion and penetration exhibited by putrefaction, that the chief agents in this process appear to be "vibrios" endowed with the faculty of locomotion, so that they are able to make their way speedily along a layer of fluid such as serum or pus.

Admitting, then, the truth of the germ theory, and proceeding in accordance with it, we must, when dealing with any case, destroy in the first instance once for all any septic organisms which may exist within the part concerned; and after this has been done, our efforts must be directed to the prevention of the entrance of others into it. And provided that these indications are really fulfilled, the less the antiseptic agent comes in contact with the living tissues the better, so that unnecessary disturbance from its irritating properties may be avoided.

The simplest conditions are presented by an unopened abscess. Here, as no septic particles are present in the contents, it is needless to apply the antiseptic directly to the part affected. All that is requisite is to guard securely against the possibility of the penetration of living germs from without, at the same time that free scope is afforded for the discharge from within. When this is done, we witness an example of the unaided curative powers of Nature as beautiful as it is, I believe, entirely new. The pyogenic membrane, freed from the operation of the stimulus derived from the presence of of the pus pent up within it, without the substitution of the powerful stimulus of decomposition as has heretofore been the case after the opening of abscesses, ceases at once to develop pus-corpuscles, and, exuding merely a little clear serum, rapidly contracts and coalesces, discharging meanwhile its unirritating contents completely, whether the outlet be dependent in position or otherwise. At the same time the irritative fever and hectic hitherto so much dreaded in large abscesses are, with perfect security, entirely avoided.

In suppurations of the vertebræ or of the joints, the results of this system are such as I ventured with trembling hope to anticipate; patient perseverance being rewarded by a spontaneous cure in cases where excision, amputation or death must have resulted from any other known system of treatment. In short, the element of incurability has been eliminated from caries.

In compound fractures and other severe contused wounds the antiseptic agent must in the first instance be applied freely and energetically to the injured parts themselves, the conditions being the opposite of those in unopened abscesses. The wound being of complicated form, with its interstices loaded with extravasated blood, into which septic organisms may have already insinuated themselves during the time that has elapsed before the patient is seen by the surgeon, mere guarding of the external orifice, however effectually, is not sufficient. After squeezing out as much as possible of the effused blood, a material calculated to kill the septic particles must be introduced into the recesses of the wound; and if the substance employed is of sufficient strength to operate to a certain extent as a caustic, this is regarded as a matter of little moment in comparison with the terrible evil of inefficiency in its antiseptic action. For experience has abundantly shown that parts killed in this way, including even portions of bone, become disposed of by absorption and organization, provided that the subsequent part of the treatment is properly managed.

Sloughs, as ordinarily observed, are soaked with the acrid products of decomposition, and therefore produce disturbance upon the tissues around them, leading first to their gradual transformation into the rudimentary structure which, when met with at the surface of a sore, is termed "granulations," and afterwards to the formation of pus by the granulations. But a dead portion of tissue, if not altered by adventitious circumstances, is in its proper substance perfectly bland and unirritating, and causes no more disorder in its neighborhood than a bullet or a piece of glass, which may remain imbedded in the living body for an indefinite period without inducing the formation of pus; while the dead tissue differs from the foreign bodies alluded to in the circumstance that the materials of which it is composed are susceptible of absorption.

Antiseptic substances, being, like the products of decomposition, chemically stimulating, will, like them, induce granulation and suppuration in tissues exposed for a sufficient length of time to their influence; but there is this all-important difference, that an antiseptic merely stimulates the surface to which it is applied, becoming diluted and weakened by the discharge which it excites; but the acrid salts which result from putrefaction are perpetually multiplied and intensified by self-propagating ferments, so that every drop of serum or pus effused through their agency becomes a drop of poison, extending its baleful influence both in the injured part and in the system generally.

These pathological considerations indicate the after-treatment in compound fracture, and explain the progress of the case. The antiseptic introduced into the wound is soon washed out by the discharge or carried away by the circulation, so that the blood and sloughs at first imbued with it become unstimulating and amenable to absorption, while at the same time they are prone to decomposition should any living atmospheric germs gain access to them. The further treatment, therefore, must consist in maintaining an efficient antiseptic guard over the orifice of the wound until sufficient time has elapsed to ensure complete consolidation of the injured parts.

The sanious and serous discharge which occurs at the outset will give place in a few days to a small amount of pus, if the wound is dressed in such a way that the antiseptic continues to act upon the raw surface. This discharge, due to the stimulating nature of the application, being merely superficial, and involving no inflammatory or febrile disturbance, will occasion no anxiety to one who understands its cause; and I venture to repeat the caution given in a previous communication, that the surgeon must on no account be induced to explore the wound and pry into the source of the suppuration, so long as all is going on well otherwise; for such a course, by admitting germs into the interior, may produce the most disastrous consequences in an otherwise promising case.

But although suppuration resulting from the stimulating influence of the antiseptic is no cause for anxiety, it is more convenient that it should be avoided; and this may often be done entirely by leaving the lower layers of the dressing permanently on the limb and changing only its superficial parts—a plan which, while it protects the wound against the introduction of mischievous particles, permits the foreign body in contact with the tissues to part with its antiseptic material and become an unstimulating crust, under which complete healing by scabbing may occur in wounds of a size hitherto regarded as inconsistent with this process in the human subject.

Upon these principles a really trustworthy treatment for compound fractures and other severe contused wounds has been established for the first time, so far as I am aware, in the history of surgery. In a hospital which receives an unusually large number of patients suffering from machinery accidents, and in wards which, from circumstances to which I need not here allude, were peculiarly unhealthy, my experience of compound fracture in the lower limb was formerly far indeed from satisfactory, even in the selected cases in which alone I attempted to save the limb. But since the antiseptic principle has guided us, not only have ordinary cases of this formidable injury been treated by my successive house-surgeons with unvarying success, but limbs such as I should once have condemned without hesitation have gone on to complete recovery without either local or constitutional disturbance: a statement which might be suspected of exaggeration were it not that it refers to proceedings in a public hospital, witnessed not only by students, but by gentlemen once my pupils, and now practitioners in Glasgow.—*London Lancet, Nov. 30th*, 1867.

PLASTER OF PARIS SPLINTS.

Assistant-Surgeon Moffat strongly recommends the following as the best method of making these useful splints. Plaster of Paris, in a proper state, water, spermaceti ointment, a small basin and a spoon, being in readiness, a piece of flannel is to be cut, of shape and size fitted to envelope the limb, with the exception of a longitudinal space, of about half an inch in breadth, between its two edges. The limb should then be greased with spermaceti ointment, and the hairs smoothed down to the skin, or, what will be found to answer as well, if not better, a calico roller may be wound spirally round the limb, and divided at a later period, after the plaster covering is applied, along the vacant interval between its edges. The

calico will not only prevent the hairs from sticking in the plaster, but will also form a neat lining for the splint. Either of these steps having been taken, equal parts of plaster of Paris and water should be quickly and thoroughly blended together by stirring, and in this mixture should be immersed, with the hands, the piece of flannel. When saturated, and its surface completely covered with plaster, it should be withdrawn from the basin, the folds and creases stretched out of it, and it should then be applied and pressed to the limb so as to fit it accurately, without, however, permitting its edges to join each other; the object of this last precaution being to leave a narrow open space up the whole length of the limb, to allow for the occurrence of swelling. In this position it should be held steadily until the plaster has set, which will generally not occupy longer than five minutes. Should the splint, after the plaster is set, be considered not to have strength and firmness enough, another layer may be applied over it exactly in the same way. A roller may now be applied lightly over the whole. The quantity of plaster requisite for a leg is about eight ounces; for the thigh and arm in proportion. There are many other methods, but this is far the best. If it be desired to strengthen the splint, it may be overlaid with another piece of flannel covered with a paste of dextrine.—*British Medical Journal, November* 30, 1867.

ON THE USE OF CARBOLIC ACID IN BURNS.

BY WILLIAM PIRRIE, F.R.S.E.
Professor of Surgery in the University of Aberdeen.

Having perused in the columns of the *Lancet* Professor Lister's original communications on the use of Carbolic Acid; having also, on the 7th of August, at the meeting of the British Medical Association in Dublin, heard him read a paper on the advantages resulting from its employment in various surgical affections; and having, on my arrival at the Aberdeen Hospital on the following Sunday morning, been called to an extensive burn, just admitted,—it occurred to me that carbolic might be found as useful in burns as it has proved to have been in other cases.

The patient, Ann G——, a thin, delicate-looking girl, eleven years of age, about twenty minutes before admission into hospital, while sitting before a fire without any dress except a thin chemise, which extended as far up as her shoulders, got a quantity of hot water spilt over the upper part of her body. The whole of the left side of the face and neck, and also the whole of the back and left side of the body, as far down as the iliac crest, together with the left arm, were of a deep red color. On many parts, especially about the face, neck, and shoulder, there were innumerable small vesicles (other parts were free from vesicles); and on the arm there were two bullæ, one about the size of a penny, the other a little larger. The burn was thus, evidently, partly of the first and partly of the second degree. The patient was affected with shivering; she complained of excessive pain; the pulse was extremely feeble, rapid, and irregular; and she was troubled with vomiting, which continued for two days. Two folds of surgeon's lint, dipped in a liniment of one part of carbolic acid to six parts of olive oil, were closely applied to the whole of the scalded surface, a double layer of tinfoil was placed above the lint, and the whole secured by means of a bandage. The air was thus completely excluded, and in ten minutes, the patient, much to my surprise, stated that she was free from pain. On the second day after the accident the skin was greatly improved, and the bullæ seemed withering away. On the twelfth day the skin was everywhere perfectly healed, the cuticle having been thrown off; and, though the case was watched with the utmost care, not a single drop of pus was discovered.

The sudden and perfect subsidence of pain, the withering of the bullæ, the complete healing of such an extent of scalded surface without the slightest suppuration, in a patient of feeble constitution and greatly depressed by shock, appear to me to show that carbolic acid is well deserving of trial in burns of the first and second degree. I have seen some scalds of less extent prove fatal, and I have seen many not so unpromising at first end in suppuration and ulceration of skin, and require months to heal.

For making clear the state of parts in the first and second degrees of burns, I have been in the habit of stating to our students that they are precisely the same as those which usually result from the application of a blister; the inflamed part, without separation of the cuticle, resembling the first, and the part covered by vesicles and bullæ resembling the second, degree of burn. This resemblance of the states of parts in blistered surfaces to those in the first and second degrees of burns suggested to me the desirableness of trying the effect of dressing a blistered surface with the above-mentioned liniment of carbolic acid and olive oil. This was done in the following case, which was carefully watched and recorded by Mr. Nicoll, one of the most talented of our students, who at the time was doing duty for our house-surgeon:

Helen W——, aged twenty-seven, was admitted under my care on the 27th of August, in consequence of an injury to her right hip joint, caused by a heavy sack of meal having fallen upon her from a great height. Some subacute inflammatory action took place in the joint; and, after other treatment, a blister of the size of the hand was applied, on the 4th of September, to the outside of the hip, and allowed to remain for seven hours, till vesication to a considerable extent was produced, when it was removed; the sensations of the patient and the condition of parts being precisely the same as in burns of the first and second degree. The blistered part was dressed in every respect as in the preceding case of burn, and in fifteen minutes the pain entirely ceased. On the morning of the 5th of September, the blistered surface and bullæ presented the same appearance as on the removal of the blister; on the evening of the same day the smaller bullæ had begun to disappear. On the evening of the 6th the smaller bullæ were gone, and the larger greatly diminished; and on the evening of the 8th of September the parts were perfectly healed, no suppuration having taken place.

In both cases carbolic acid seemed to accelerate the subsidence of local symptoms, to procure rapid and perfect relief from pain, and to promote healing without suppuration. If in other cases of the same degrees of burn carbolic acid should be equally useful, it would be a great blessing in the treatment of these dangerous and painful injuries.

Although water may answer for diluting carbolic acid, when used for some purposes, oil must be preferable in cases of burns.—*From the London Lancet, November* 9, 1867.

MISCELLANEOUS.

We copy from *The Public Health*, a new London medical journal, the following article on animal vaccination. In consideration of the presence in our midst of variola, this article may prove interesting. The question of animal vaccination is exciting a great deal of interest in the medical circles of London, and the present epidemic may develop facts in reference to the protective influence of previous vaccination when the matter was derived from the human subject, which may lead us to adopt the suggestions given by Dr. Ballard in the following article, as the means of more effectually guarding against the recurrence of this horrible malady:

ANIMAL VACCINATION AND ITS ADVANTAGES.

By Edward Ballard, M.D., Med. Officer of Health for Islington.

I had recently the pleasure of opening a conversation at the Metropolitan Association of Medical Officers of Health upon the subject of animal vaccination, when great interest was manifested by those present, and a desire has since been expressed that my remarks should be committed to paper. To those who had not kept up their reading of foreign journals, and of the debates in the French Academy, the facts put forth were new. I myself cannot conceal my opinion that the practice of animal vaccination is one which at any rate deserves serious consideration on this side of the Channel, although I do not concur in regarding all the arguments adduced in favor of it as possessed of the full force which has elsewhere been assigned to them. It is the fate of nearly every new proposal in practical medicine to meet with enthusiastic supporters on the one side, and with equally obstinate detractors on the other, and the final result of the clashing of minds is, that the truth is found to be somewhere between the extreme opinions. The subject of animal vaccination has been no exception to this rule.

When in Paris, last summer, facilities were kindly afforded me by M. Depaul, the "Directeur de Vaccine," and by my friend, M. Chambon, who, with M. Lanoix, is actively engaged in the work, on behalf of the academies, to become practically acquainted with the procedure. The International Medical Congress was in session; the exhibition had its attractions, and I had a very few days at my disposal, but I had previously

determined to supplement my reading upon a matter which interested me by some ocular demonstration.

Shortly after the introduction of vaccination into Italy, Troja, of Naples, conceived the idea of taking the vaccine virus from the cow for the purpose of human vaccination, the animal having been inoculated from the human subject. This procedure is that which we commonly know as retro-vaccination. On the death of Troja, Galbiati carried on the same practice in the teeth of great opposition, and when he died he was succeeded by his pupil, M. Negri, to whom we owe the practice of animal vaccination as it is understood now. This gentleman has presided over animal vaccination in Naples for the last twenty-four years, and three times during this period he has obtained a new supply of lymph from cases of natural cow-pox, on each occasion maintaining the supply by an uninterrupted succession of inoculations from animal to animal. The lymph then used for human vaccination by Negri has never at any period of its successive generations passed through the human system—it has been propagated week after week by inoculation from heifer to heifer. At first M. Negri had to encounter the same difficulties as his predecessors ; but, at the present time, so thoroughly have all the prejudices upon the subject been cleared away, that he vaccinates in the course of a year from the heifer 3,000 or 4,000 persons, a number really nearly equal to the annual births that take place. A few years ago M. Lanoix, a young Parisian physician, visited Naples and brought away with him a vaccinated calf, and after introducing the practice into Lyons, established it in Paris, under the auspices of M. Depaul ; and now, in all the vaccinations of foundlings, &c., performed under the direction of the Academy, virus from the calf alone is used, and it is this alone, as I understand, that is now transmitted in tubes into the provinces. I may mention that doubts have been thrown upon the source of the virus with which M. Lanoix's first calf was vaccinated, but I have shown that these were quite unfounded, and the character of the virus used for animal vaccination in Paris has now been set at rest by the fact that shortly after M. Lanoix's return a new source of natural cow-pox was discovered at Beaugency, and ever since this alone has been propagated, the virus from the Neapolitan source having been allowed to die out. The practice of animal vaccination has also been introduced into Vienna, Berlin, Brussels, and St. Petersburg, in all of which cities we are given to understand that it has taken root. There must then be some advantages which have led to its adoption in so many places.

The procedure, as followed by M. Chambon, in Paris, is this : Arrangements are made by which a succession of heifers or calves, of about the age of five months, is provided for. They are carefully stabled, and fed upon the diet to which they have been accustomed. The animal to be vaccinated is placed on its left side and fastened down upon a table of convenient construction, and the operator proceeds to shave with a dry razor the right side of the abdomen, commencing from the udder, and over a space of about ten inches long by six or eight broad. The calf, which is the vaccinifer, is laid also upon its left side and fastened down, and the fluid is obtained from a pock, by forcible compression of its base by a pair of spring forceps, and the result is the rupture of the pock, and the abundant flow from it of a quantity of a thickish sulphur-coloured fluid, which is taken upon the lancet, or into capillary tubes, for the purpose of preservation. The animal on the table is vaccinated upon the shaven surface by puncture in sixty or eighty places, and means are adopted to prevent subsequent injury by biting or licking. Pocks, which finally attain the size of large human vaccine pocks, speedily begin to rise, and are used for the vaccination of children from the fourth to the sixth day. Subsequently to this the vaccine they contain is found to be less active, but still sufficiently so for the vaccination of another calf, for which the pocks left unopened are therefore used on the seventh or eighth day. The grounds upon which the practice of animal vaccination has been advocated are mainly three, and refer to the following points, namely, the quantity of virus which may, so to speak, be manufactured, its energetic quality, and its purity. I may make a few remarks upon each of these.

At different times all who are engaged in vaccination have, I presume, experienced a difficulty in meeting the demand for vaccination by the supply of fresh virus at their disposal. It is always undesirable to make use of preserved lymph, but in seasons of sudden epidemic outbreaks of small-pox, when large numbers of persons apply for secondary vaccination, and arrears of neglected children are brought in for primary vaccination, even the expedient of employing preserved lymph sometimes fails, and delays of a dangerous character have arisen. Such delay could never happen where a vaccinated calf is existent. The supply from sixty or seventy pocks would be practically inexhaustible—absolutely sufficient for the vaccination of as many persons as could well be operated upon directly, while the virus is sufficiently active. Another advantage is, that the vaccinifer can be readily made to travel to any place where a local demand for virus may suddenly arise. One or two heifers kept in London, for example, would suffice for any demand likely to be made in any part of the metropolis or in the provinces.

The quality of vaccine virus can only be judged of by its effects when inoculated, and judged of thus there can be no question that much of the virus commonly in use even in this country fails to produce pocks of a character that can be regarded as satisfactory. I do not say that good, even typical, pocks are never seen. But that they are sometimes produced depends upon this, that from to time time individual practitioners have availed themselves of local outbreaks of natural cow-pox in dairy farms, to renew their source of virus. Such outbreaks, however, are capricious, and although scarcely a year passes, without their occurring somewhere in the kingdom, they are not utilized as they might be. One difficulty lies in the very brief period during which the pock by chance discovered upon a cow can be used with a chance of success for human vaccination. It is probable that at any rate some of the lymph used in the country at the present time has been continuously reproduced by human generation from the time of Jenner. But this would make no difference were it not capable of proof that repeated human generation does impair the quality of the cow-pox virus. And such proof, satisfactory to my mind and that of many others who have had the opportunity of studying the question, exists. I need only refer here to the comparative experiments made by Bousquet and Steenbrenner for the settling of this point. The impression made upon the mind of M. Bousquet is the more important, because prior to his experiments he advocates in forcible language and very consistently the doctrine of the unalterability of the virus by human generation. He saw there was a grand difference between the pocks he was habitually producing, and the delineations in Jenner's book, but persisted in regarding it as due to the exaggeration of the limner. The chief points in which an active virus shows its superiority over one of lower energy, such as is used now in the more deliberate evolution, are in the fullness and firmness of the pock, the comparatively late period at which the areola appears, the long period of limpidity of the lymph, the later period of incrustation, and the delay in the fall of the crust. The general febrile phenomena are also marked, and engorgement of the lymphatic glands is a more frequent accompaniment of the local irritation. Now it is in these particulars that a pock produced by inoculation from a vaccinated heifer shows its superiority over that produced by ordinary arm-to-arm vaccination. It is not asserted, as I understand it, that the vaccination is on the whole more uniformly successful, but that it makes a stronger impression both locally and upon the system at large. A colored plate appended to Dr. Depaul's paper in the Comptes Rendus of the present year gives a representation of the results obtained on the same subject when vaccinated with human lymph on the one arm and animal virus on the other. The contrast is striking.

But the principal reason why animal vaccination has been recommended for adoption is that the practice of vaccinating from the heifer insures freedom of contamination with any extraneous virus, and the impossibility of communicating any other disease than the vaccine from the vaccinifer to the subject vaccinated. The interest of this supposed advantage centres itself upon syphilis. I think that the possibility of communicating syphilis with vaccine by the same act of inoculation can no longer be doubted, and, for my own part, I have no doubt whatever that under certain circumstances, both vaccine and syphilis may be communicated from a vaccinifer constitutionally syphilitic. I think there is sufficient proof that such an event has happened on various occasions in Italy, France, and Germany. In 1864 M. Depaul presented his celebrated report on the subject to the French Academy, in which he recommended, mainly on the basis of this danger, the abandonment of arm-to-arm vaccination, and the sole adoption of animal vaccination. I may add that it was with reference to a similar change that the practice of animal vaccination was supported by Negri and his predecessors in Naples.

These being the advantages it is proposed to secure by means of animal vaccination, it may be expected that I should briefly state my own opinion as to the value of the practice re-

garded from the several points of view, and its applicability to the circumstances in which we are placed in this country. On what grounds could the adoption of animal vaccination be fairly urged in this country? I may dispose of the argument at it relates to syphilis first of all, and say that if this were the only argument for its adoption that could be put forward it would carry little weight in my mind. I have taken some some pains to make myself acquainted with the literature of vaccinal syphilis, and have, I believe, at one time or another read the history of every reported circumstance of its occurrence in this country, and in none am I satisfied that the event was brought about in the manner supposed. I do not say that a syphilitic vaccinifer has never transmitted the disease to the child vaccinated from it, but no proof of it has, so far as I know, ever been furnished on the Continent. If it ever has happened here, it must have been so rarely as to impart to the event a character of great infrequency. Practically, the danger is *nil*. Why the danger should be regarded as great on the Continent and so trifling in England I cannot say, but I believe the explanation to reside in the fact that with us vaccination is, on the whole, more carefully performed, that more care is taken in the rejection of syphilitic vaccinifers, and that the punctures made in the vesicles are habitually too superficial to cause any intermixture of blood with the lymph.

As respects the other arguments I think they have much force. I think there would be found not only a convenience but an improvement in the character of our vaccinations to result were the practice adopted in London and other of our large cities of maintaining a good supply of virus by means of a succession of heifers. That much of our national and public vaccination is most miserable in its character has been amply shown by the published reports issuing from the office of Mr. Sims. It might be improved were there any national arrangements in force by which the occasional occurrence of national cow-pox could be utilized and made subservient to the public advantage. It might, also, I think, be improved were there such a source of good virus as the weekly vaccination of a heifer would provide, to which practitioners who were dissatisfied with the virus they are using might have recourse for the improvement of their supply. I am far from going the length of M. Depaul in condemning arm-to-arm vaccination. I do not think it at all desirable that it should be abandoned. It would be very long before public prejudice or public opinion would permit of its abandonment. Nor do I regard its abandonment as necessary. Experience has shown that although human transmission gradually weakens the energy of the vaccine virus, it is long before the weakening becomes sensible, so long that the occasional renewal of a supply where arm-to-arm vaccination is practised and the vaccinifers carefully selected, is all that is needed so far as quality of the virus is concerned. This, then, is my verdict. I should be glad to see animal vaccination introduced into this country as a part of our national arrangements for the prevention of small-pox. I believe that good would result from it; but I believe at the same time that popular attention to the subject is more likely to be attracted in England by putting forward the claims of animal vaccination with due moderation than by extravagant proposals based upon alarming and over-colored pictures of the dangers of arm-to-arm vaccination.

REVACCINATION.

Revaccination; value of the Scar left by the first Vaccination as an Indication of its Protective Influence.—We find the following interesting and important statistics in the Report of Drs. Seaton and Buchanan on the State of Public Vaccination in London, and on the recent Epidemic of Small-pox, appended to the Sixth Report of the Medical Officer of the Privy Council for 1863:

In the course of our school inquiry, we obtained facts that corroborate in the strongest way the law of connection between deficient vaccine scars and post-vaccinal small-pox. By showing how much small-pox has prevailed in the vaccinated children, the facts we are going to cite would be of themselves a sufficient condemnation of much of the London vaccination. We found eighty-eight children scarred by small-pox out of the 49,570 school children who bore vaccine scars. This is at the rate of 1.78 per 1,000 of vaccinated children. Excluding the infant schools, and looking only to those children whose ages had given them longer exposure to small-pox, it was found (1), with respect to the quality of the vaccine scar, that out of each thousand children with typical scars, 1.22 were pitted by small-pox; out of a thousand with tolerable scars, 2.35 were pitted by small-pox; and out of a thousand with bad marks, 7.60 were pitted by small-pox. (2) As for the protective influence of the quantity of vaccination in the individual, it was further ascertained that of those children who had four scars (whatever their quality), 0.67 only per thousand were pitted by small-pox; of those who had three scars, 1.42 in the thousand were so pitted; of children with two marks, 2.49 in the thousand were scarred by small-pox; while those children who had only one vaccination mark were scarred with small-pox at the rate of 6.80 in the thousand. At the one extreme of goodness, with four or more typical scars, only 0.67 per thousand children were scarred by small-pox, while at the other extreme of badness, with one bad scar only, 19.0 per thousand were scarred by small-pox. The best vaccination, therefore, was more than thirty times as protective as the worst.

Iodine and Carbolic Acid.—The *Journal des Connaissances Medicales* publishes a letter addressed to Dr. Caffee on Dr. Percy Boulton's late discovery of the action of carbolic acid on iodine. "The inconvenience," says the writer, "attending the external application of iodine and its preparations is so serious that physicians are often compelled to abandon a remedy, the therapeutic efficacy of which is undoubted, nay almost unequaled, in *materia medica*. The great objection to the external use of this remedy is, that it leaves marks both on the linen and on the skin. This is a sufficient motive for seeking some means of getting rid of this drawback, especially in the case of ladies. Dr. Percy Boulton's method consists in adding a few drops of phenic (carbolic) acid to the iodine solution to be employed. This addition renders iodine perfectly colorless, so that it may be applied with impunity. But this combination has another advantage. It appears from that practitioner's observations, which I can affirm, that, so administered, carbolate of iodine, which is the new substance in question, is not only one of the most powerful antiseptics we possess, but is intrinsically a more efficacious agent than iodine alone. I have used this compound under the form of injections, gargles, and lotions, in all cases in which iodine is prescribed. In sore throat, ozæna, abscess in the ear, etc., this preparation is a sovereign remedy; since, besides its disinfecting qualities, it modifies the mucous membrane, causes all local sensibility to disappear, and cures the patient much sooner than if either of the two agents were employed separately. The formula I employ is as follows: Compound tincture of iodine, 3 grammes; pure liquid carbolic acid, 6 drops; glycerin, 30 grammes; distilled water, 150 grammes.—*Scientific American.*

Iodine is also deprived of its color by the hyposulphite of soda, and it is best effected by adding one-sixth of a saturated solution to the tincture of iodine. The latter floats upon the former, but thorough agitation will produce a beautifully clear solution.

Digitilas in large doses, so lately vaunted as a remedy for delirium tremens, has failed to receive the confidence of the profession, and now capsicum appears to be taking its place. A bolus of thirty grains was given in one case, and caused a slight burning in the mouth and throat for a time, but no serious inconvenience, and in less than an hour the patient fell into a profound sleep, from which he awoke three or four hours later in a state of convalescence. In the Melville Hospital seventy or eighty cases were successfully treated with this remedy in single or repeated doses, ranging from twenty to eighty grains. Twenty years ago, during the "Washingtonian" temperance excitement in Philadelphia, it was a common practice for the reformed drunkards to get hold of all cases of delirium tremens which they could find, and "cure them with capsicum administered in good beef or mutton soup." We can bear testimony to the eminent success of the treatment. The broth, red with pepper, was poured in lavishly, the tolerance of the stomach being the only limit, and nothing else was suffered to pass the lips. The cure was prompt and complete, without prostration. Almost any treatment, however, will cure this disease, terrible as are its manifestations, provided the patient be not killed in the effort to save him. The worst cases are those in which the stomach rejects everything, nutriment and medicine—in fact, when gastritis exists. Here cupping or leeching to the epigastrium, followed by a large blister, will sometimes save life. For internal medication in such cases, the rectum, of course, is not to be overlooked.

Delirium Tremens Treated with Cannabis Indica.—Dr. Bedoe, physician to the Bristol Royal Infirmary, advises, in the treatment of *mania-a-potu*, the employment of the cannabis indica. He usually begins with a grain of good extract or twenty minims of the tincture; waits from four to six hours, and then, if the patient be awake, gives a double dose. If this also prove fruitless, six hours later he gives three or even four grains; then allows six or eight hours to pass, and, if necessary, tries a yet larger dose. Longer intervals are obviously needful for extract than for tincture. In one case Dr. B. gave as much as six grains before the patient began to sleep. Along with the remedy he is accustomed to give as much soup, milk, and other digestible food as the patient's stomach will bear, and says that cannabis does not injure the appetite as does opium. He rarely gives alcoholic stimulants unless the pulse gives unmistakable evidence of its propriety. —*Medical Record.*

Narceine.—Narceine is coming into great fashion among the French to replace morphia. The dose generally given internally is from a sixth to half a grain. At the outset it diminishes the pulse, but subsequently accelerates the pulsations. It does not seem to produce constipation, but rather a free action of the bowels. It is said to retard menstruation. Dr. Eulenberg prefers it to any other narcotic, and gives it in neuralgia, in painful affections generally, and in articular diseases, iritis, cystitis, and orchitis, stating that it produces sleep, "which is soft, tranquil, uninterrupted, and followed by a quiet awakening." Narceine is reported to be preferable to morphia, as a general rule, and to act effectually in those cases in which morphia fails.—*St. Louis Medical Rep.*

ITALIAN MUTUAL BENEVOLENT ASSOCIATION.

This Society, which dates its existence as far back as 1858, is now in a most flourishing condition. Not long ago the Board of Trustees purchased two blocks of land in the Western Addition with the view of erecting a magnificent hospital thereon, and we hear with pleasure that the plans have already been accepted by the Society, with the intention of pushing on the work as rapidly as possible, and for this purpose a committee to solicit donations and subscriptions has been appointed, composed of the following gentlemen: N. Larco, A. Mangini, B. Sbarboro, L. Bisagno, E. Casanova, A. D. Splivalo, C. Scalmanini, A. Giorgiani, D. Ghirardelli, G. Sala, G. Brignardello, G. Musto, L. Gilhardi, A. Paltenghi, G. Campi, F. Daneri, G. Tavolara, G. Cadenasso, G. Simi, L. Costa, P. Reali, F. Ciarla, A. Pistolesi, Cacioppo Mariano, A. Boitano, Marchini Mariano, O. Samengo, G. B. Andornetti.

At the first meeting called by this committee on Sunday last, seventy subscriptions were obtained, in sums ranging from five hundred to five dollars, making a total of nearly four thousand dollars. Taking this as an average, and considering that the Society numbers over one thousand members, together with whatever subscriptions may be obtained from outside friends, we make a sure prediction in saying that the magnificent edifice contemplated will soon raise its imposing and beautiful proportions to embellish the western portion of the city.

This Society, though Italian in its character, is not exclusively so, for any person in good health and reputation may join it, and, by paying the small sum of one dollar per month, be entitled to its beneficent care during suffering and sickness.

PEST HOUSE RULES AND REGULATIONS.

1st. No private nurse will be permitted to wait upon a patient without a special permit from the Chairman of the Hospital Committee.

2d. Nurses so admitted will be required not only to attend the patient for whom he is employed, but also to assist, so far as may be necessary, the regular nurses in the discharge of their duties.

3d. No nurse will be permitted to leave the establishment without first having taken a plunge bath and made an exchange of clothing, leaving such articles behind as were worn whilst in attendance on a patient.

4th. All private nurses to be under the entire control of the Visiting Physician, and in his absence, under the nurse of the establishment.

5th. All articles brought into the hospital for use of patients, (particularly liquors) to be deposited with the Physician or his representative, and to be dispensed only under his direction.

6th. All articles of value, including money in possession of patients, to be deposited with the physician or other properly authorized person to receive them, who will give a receipt for the same, and the property be returned to the owner or other duly authorized person, on demand, accompanied by the receipt.

7th. All bedding, clothing, etc., worn by or taken to the Hospital by the patients, must be left and destroyed by the proper authorities.

8th. The Chief Nurse will see that the above Rules and Regulations are rigidly enforced; and to report at once any violation of them to the Chairman of the Hospital Committee.

R. Beverly Cole, M.D., *Chairman.*
John Harrold,
Chas. H. Stanyan,
Hospital Committee.

San Francisco, June 17th, 1868.

FEMALE PHYSICIANS.

The telegraph informs us that in the Pennsylvania State Medical Association a resolution to admit female physicians was defeated—ayes, 37; noes, 45.

NOW READY!

THE FIRST NUMBER OF THE NEW CALIFORNIA MAGAZINE, THE

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CURRENT LITERATURE.

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INTRODUCTORY ADDRESS TO A COURSE OF LECTURES ON CHEMISTRY AT THE TOLAND MEDICAL COLLEGE.

By THOMAS PRICE, M.D.,
Professor of Chemistry.

GENTLEMEN,—My worthy and respected colleagues have deputed me to bid a welcome to you all. Some of you have already attended one course of lectures at this College, and we are glad to see you here once more. We hope that the long vacation, just passed, has renewed your strength and increased your zeal for the study you have commenced—that you come back with the determination to apply yourself most diligently to each and every branch required by the Faculty of this College.

The new students, who are now for the first time to commence their collegiate course of medical study, will look up to you, and to a very great extent will follow your example and advice. If they find you hard at work, and applying all of your energy to your studies, you will thus prove to these freshmen, at the outset, that the work they have to accomplish is no easy task. It is well that they should be made to feel, at the commencement of their studies, that the prize they have to win is not easily won. Remember that the character of the medical profession is in your hands. You will be the models by which they will shape their course of conduct. By your example, let them therefore understand that they will have need of all their talents, of all their energy, of all their perseverance, pluck and determination, to ensure their success at such an examination as you yourselves will undergo at the end of this session.

Through the benevolence and kind-heartedness of a lady patron of this medical school, a valuable and costly gold medal is always, at the close of the session, presented to the best student of the graduating class, and I have no doubt that each one of you has already made up his mind that the valuable prize shall be his.

It is to you, gentlemen, who are now about to commence your medical studies for the first time, that I would particularly address myself. You have selected medicine as your profession, after examining the merits of the various professions, trades and mercantile pursuits; and for some reason or the other best known to yourselves, you have decided upon the medical profession. Having made your choice, it will be expected of you, as your bounden duty, to employ to the best purpose the talents given you; and during the short sessions through which you attend the lectures of this school of medicine, your whole attention must be given to your work. You cannot afford to lose any time. The earlier and more zealously you set about your work, the easier will it be for you. To become a skillful and learned physician, you must, according to eminent authority, "be not only well grounded in the common learning of the schools—classics, mathematics, modern languages and history—but you must also be perfect anatomists, profound physiologists and pathologists, consummate chemists, mechanists of the first order, and you must be thoroughly versed in the natural history and structure of plants and animals." Do not let this formidable array of studies frighten you; remember that your greatest difficulties will be at first, and that every obstacle you overcome will help you to overcome the next. Be determined that you will let no difficulty discourage you. Although your studies are so varied and intricate, by the facilities offered you at this College, their acquisition is rendered comparatively easy after all. In the adjoining hospital you have unusual advantages and opportunities of becoming practically acquainted with disease, clinical observations and teaching in the wards. It is not theory and book knowledge alone you will be taught, but theory and practice so blended, that, with moderate attention, application and perseverance on your part, you will be well qualified for your profession when this Faculty will present you with your diploma.

In pursuing your studies, remember that the lectures of the Professors do not teach you even all the essential truths of the science. Our course is so short, that we can only take the most hurried glance at each subject allotted to us; indeed, we can give you very little more than a kind of syllabus of the information that will be demanded of you at the examination. We can only clearly point the way, hence the necessity for you to be present at all the lectures. You cannot consider that any lectures will be delivered here that do not contain important information.

The practice of taking notes during lectures may be beneficial or injurious. To take very full notes, I consider a very great mistake; for it is impossible for the student to both keep his eye on the paper, and at the same time to pay proper attention to the lecturer and to the illustrations which he is employing. The attention is in danger of being entirely distracted by the mechanical effort of writing. The only value these notes may have is to guide you, and as all the text books recommended will give you full details, I would advise you to take down only numerical details, illustrations, special information and references to authors, and at the end of each day's labor to enter such in a memorandum or in the *index rerum* as described by Todd in his Guide to Students.

I will now call your attention to that branch of your study left to my charge. Chemistry is very often neglected by medical students. Some consider it not a very important branch, either in itself or in its application to medicine; and others, from its wide range and its difficulties, become frightened, and do not pursue their studies. The great trouble with the chemical lecture is, that we have to teach in the medical schools that portion of chemistry with which you ought to have been perfectly familiar before entering yourself for a medical course. Sometimes, chemistry is neglected because students think that chemistry has nothing else to do than to teach the mixing of ingredients, and that the pharmaceutical chemist can do this for them. The science of chemistry is of the greatest value to you. Do not think that it is inapplicable to disease and medicine—that it is essential at the drug store, but not of any use to you. Chemistry is something else than the mixing together of *sulphate of magnesia and senna* or the dissolving of sexquioxide of iron in muriatic acid. A knowledge of its elementary branch would greatly facilitate your studies. In physiology and *materia medica*, indeed, I cannot conceive it possible for you to thoroughly understand them without a fair knowledge of the great principles of chemistry, and, certainly, to follow the recent investigations of the physiologists without them is an impossibility.

Our course will commence with chemical nomenclature and notation. It is true that you will find but little that is strictly medical in this part, but without it you cannot be made to understand the great and vital facts of chemistry. This is the alphabet of chemistry. The chemistry of the elements will follow next—the elements that form the whole of the vegetable and animal kingdoms. We shall then proceed to examine the percentage quantities of each element in various substances. We shall study the composition of the air—the air we breathe—upon the presence of which depends both vegetable and animal life. It is the province of the chemist alone to investigate this. The anatomist cannot discover anything by

the use of his knife here, nor can the surgeon perform any operation on it, so as to modify its qualities. It is an acknowledged fact, that upon the presence of certain ingredients in the air depends the health of a community. Here in San Francisco, as in all other well regulated towns and cities, we have a Health Officer, whose only duty is to watch the murderous miasma evolved from decaying vegetable and animal matter and stagnant water, to determine when it becomes necessary to close the cesspool; in fact, it is his duty to watch and observe where these invisible chemical compounds are generated, and arrest their deadly and poisonous action on human life. And you, gentlemen, who are to be the special guardians of our families, must have that knowledge of the surrounding influences producing disease, to enable you to prevent as well as to cure. As our course advances, water will come under our notice, and we shall study it in its various forms and conditions. Dr. Miller says: "Typhus, diarrhœa, even cholera itself, may often be traced to the contamination of the water supply of a district with organic impurity." In a new country, like California, it would be well that the physician be acquainted with the chemical composition of the waters of the district in which he resides. Since we have not the advantage here of any analysis on record, I claim it the duty of the physician to analyze them or have them analyzed. As a sanitary measure, much good would in this way be accomplished.

Dr. Nichols, in a chapter on obscure sources of disease, says: "The chemical and physical condition of water used for culinary purposes has much to do with health, and is perhaps the oftenest overlooked by the physician in searching for the cause of sickness." There are abundant evidences on record of cases of illness of long standing, which disappeared entirely upon discontinuing water that had been in use for some time. It will be expected by the public that you understand not only how to cure, but also how to prevent disease, and a proper knowledge of chemistry will always enable you to realize this expectation. Among the leading physicians of the day, there are not a few who teach that chemistry will at no very distant day be the science by which we can both discover and cure diseases. In support of the great importance of chemistry, I shall quote from some of our first authorities. Dr. Bence Jones says: "When the union of chemistry and medicine is perfect, then science will show us how to keep or to regain the greatest of all blessings, health." Dr. Miller says: "Whenever the most perfect knowledge of chemistry and physics becomes the basis of rational medicine, then, and not until then, medicine will obtain the highest place among all the arts that minister to the welfare and happiness of man." Dr. Odling says: "Chemistry, indeed, as the basis of vital dynamics and sheet-anchor of rational therapeutics, must ever form an important branch of medical study." Dr. Hoffman says: "The notion that the action of most of our medicines is chemical is daily growing into a general conviction. We admit that with every change wrought by pharmaceutical agents in the state of our organism, there occurs a corresponding change in its composition, resulting from their action on one or more of its constituents; but of these transformations, which, doubtless, could be expressed in numbers as definitely as can our laboratory processes, how few are we in a condition to explain—in how few instances has the physician even a vague conception of the mode in which any medicine performs its office? Nobody doubts the power which the principles of the cinchona bark, or of tea and coffee, exert upon the living body, but we are perfectly in the dark as to the way in which they act upon the animal economy. But, if we meet with a series of similar substances in several animal fluids (*e. g.*, *urea* and *creatine*, almost constantly present in urine, *glycoll* generally, and cystine occcasionally, excreted in the same liquid), and if we find that all these substances exhibit in their chemical relations a close analogy with quinine and theine, we begin to feel a sort of anticipation of the manner in which these agents may act upon the system. Such examples illustrate at once the nature of the aid which therapeutics may confidently expect from the progress of organic chemistry. Medicine, some years ago, found itself in a predicament very similar to that of agriculture at the same period—its resources appeared to be in a state of exhaustion. The rich capital accumulated in the department of organic morphology by the industry of the anatomist, and by the acumen of the physiologist, could not yield its full fruits until an equivalent of knowledge had been drawn from the study of chemical phenomena. This state of things, however, is rapidly changing. Associated with chemistry, medicine no longer draws the veil of vitality over processes, the mysteries of which may be unlocked by the key of chemical analysis; it shrinks no longer from climbing, step by step, the ladder of recognition, because its upper extremity, disappearing among the clouds, seems to rise ever beyond the grasp of inquiry. The special zeal with which organic chemistry has been cultivated during the last thirty years, the simple and accurate methods which we now possess for determining the composition of organic products, the amount of analysis actually performed, and, more than all, the still untiring energy of the numerous laborers in the same field of investigation, hold out the promise that the connection between medicine and chemistry, becoming daily more intimate, will be productive of benefits, the importance of which we can scarcely venture to estimate in the present state of our knowledge."

When chemistry shall be more generally taught, and the great truths it can reveal be diffused among the masses, as well as among scientific and medical men, you can be certain that homœopathy cannot then flourish. The more chemically you make your studies, the greater will seem the absurdity of the possibility of the millionth part of a grain of any medicinal agent pervading the system and making head against an inveterate or acute disorder.

The microscope is also of very great value to the medical student, especially in his anatomical and pathological investigations, and it is only by its use that he can possibly obtain a clear idea of the nature of a morbid deposit; and were the employment of the microscope to become more general, important and valuable additions to our knowledge might fairly be expected. During the last few years, the spectroscope has been of great aid to the chemist and toxicologists. By its aid, they have been able to discover the presence of such minute quantities of certain elements as had hitherto baffled the attention of the analytical chemist. Until this was discovered, the chemist could only examine elements placed in his hands, but now, through the aid of the spectroscope, he can form a tolerably correct idea of the nature and composition of those distant solar orbs which fill the firmament. It is claimed that by its aid we can discover the thousandth part of a grain of blood, and in certain criminal cases this will be of immense value to the medical man, as well as to the chemist. The portion of chemistry that will be of the greatest value to you is the analytical. Indeed, I may state that a simple knowledge of the theories of chemistry, the properties of the various elements, valuable as they are, will not enable you to investigate *urinary deposits*, *calculi*, and other concretionary matter. The former knowledge you can apply to the latter. To the progressive medical student, chemical analyses are of as much value as anatomical dissections; and the day is not very distant when they will be insisted upon—being

now merely optional. If you wish to become investigators of the human system, then chemistry will be an indispensable key to help you to open the door and unveil its mysteries. And "the progress of all accurate knowledge of the actions of medicines depends now on exact chemical and physical experiments; and by the perfection of these alone will the practice of medicine lose its doubts and difficulties, and disagreements and deceptions, and become esteemed by all as the art that can confer the highest benefit upon mankind."

Instead of being, as formerly, blind wielders of heavy clubs, that may cure the disease or kill the patient; or, instead of being, as at present, "judicious" or "injudicious bottle-holders," physicians at some future time will estimate exactly the effect of the increased or diminished action of any one force upon all the other forces concerned in the production of one or more forces, or, by liberating more energy by means of the powers that are latent in food and medicine, they will restore that equilibrium of action in the body upon which our health depends.

THE MIASMATIC DISEASES OF CALIFORNIA.

By J. CAMPBELL SHORB, M.D., San Francisco.

[Continued from page sixth.]

In the early part of 1861, while on duty at Fort Umpqua, Oregon, several unmistakable cases of miasmatic disease came under our observation. Within ear-shot of the murmurs of the ocean, breathing air which came fresh from the sea—the ocean on one hand, and impenetrable pine forests on the other—far removed from the stereotyped conditions associated with the presence of this disease, we found it difficult, well grounded as we were in our faith regarding its origin, to regard these cases as belonging to that class. We adopted many theories to explain their occurrence satisfactorily; we wished to consider them as forms of irritative fever, springing from cold, digestive disorders, hepatic miscarriage, or the hundred other causes that have a tendency to light up this form of fever in the system; but, the periodicity constantly recurring, forced us at last to adopt quinine, which, though it rapidly solved the question of cure, still left the causation of the mischief buried in obscurity.

There is on the northeast bank of the Umpqua River, at the distance of some two miles from the ocean, a small collection of small houses, which is dignified by the name of Umpqua City. The town is built on an irregular crescentic line of hills, some twenty or thirty feet above the level of the sea. These hills rise abruptly from the sand plain which stretches to the beach, and enclose the town and the fort, the town being at the extreme southwestern, while the fort lies at the northeastern end of the crescent. Midway between the two sites is a belt of pine forest, probably a quarter of a mile in width, beginning at the top of the ridge and running directly to the river, shutting off communication between the fort and the town, both of which were close to the bank of the river. We treated cases of intermittent fever both in the town and among the soldiers in barracks, but the occurrence of the disease was attended with different meteorological conditions. When the prevailing wind blew in from the ocean, from the north or west, over the sand plain which was always saturated with brackish water, the disease occurred in the town, but never at the fort, the pine forest seeming to absorb the *materies morbi*, or in some occult way to rob it of its poisonous influence. If, however, the wind blew from the south or east, across the river, the fort suffered, while the town enjoyed an immunity from the miasmatic visitation, the pine forest again appearing in the character of a protector.

It may be proper here to notice a conclusion which is legitimately drawn from the fact just stated in reference to the protective influence afforded by a wood. If the cause of miasmatic disease be so intensely etherialized—if it be wedded to the air, which carries it in the same intimate, yet subtle and mysterious manner with which light and air are mingled—if it exists in it, or is combined with it, as the color in indigo—it is difficult to understand how the forest, which perhaps softens, but certainly does not entirely check the currents of air, yet stays the progress of the miasmatic onset.

The union must be of a grosser kind; it cannot partake of the nature of a chemical combination, for that is very close. The forest, like a large mechanical sieve, sifts through the fresh air free from all impurities and disease, and holds the deleterious principle imprisoned on its thousand boughs and leaves, until it perish or disappear. The poison is too tangible—has too much mechanical volume about it, is too plainly material in its nature—long to escape the keen scrutiny of modern science. We feel almost certain that, ere long, either in the laboratory of the chemist or on the wondrous field of the microscope, the dread secret will be discovered, the veil lifted, and man be supplied with the means to strike at the root of miasmatic disease with the certainty with which the needle turns to the pole.

But to return: the sand plain, to which reference has already been made, is of triangular shape, the apex being where the river meets the ocean, and the sides were washed by the river and the ocean. The plain was filled with quicksands from the beach to the fort, to that extent that crossing it on horseback or foot was at all times perilous. But, whenever an opportunity presented itself of examining the water, which welled up all over its surface, it was found invariably brackish, and the general presumption is, that it was universally so. Discarding the notion that the wind blowing from the ocean had in itself any morbific influence, we cannot help admitting that the *materies morbi* was generated from the surface of the salt sand plain, and carried by the wind directly into the town, while the pine forest protected the fort.

On this desolate plain of sand, there was not a living thing—not a blade of grass, a shrub, or flower—nothing that could by time or change of season perish and decompose—nothing that could afford the conditions for the evolution of paludal poison, which the older writers insisted upon. Towards the base of this triangular space, the plain became somewhat broken and uneven, and the little mounds that started up here and there had occasionally upon them a small creeping vine, the botanical name or nature of which we never knew, far too small, isolated and insignificant for us to trace any connection between its occurrence there and the production of the fever miles away.

On the eastern and southern exposure of the fort there was no sand plain. Directly on the south was a wide river, flowing with a very swift current, on the opposite bank of which were the primeval forests, running up to high peaks, consisting chiefly of pine and fir and brushwood, from base to summit, impenetrable alike to man and beast. On the east were high sand hills, and five miles up the river a salt marsh of irregular oval outline, in its short, probably three quarters of a mile, in its long diameter four miles. This marsh, except at extreme low tides, was always covered with brackish water. Various marine grasses, shrubs and plants grew thickly upon it. It was composed entirely of alluvial formation, consisting of the washings of the banks of the river, carried off by the sharp abrasion of an unusually swift current, and deposited at

this elbow as it were of the river. Whether the fever which occurred at the fort during the prevalence of easterly winds, which blew in that direction whatever exhalations this marsh generated, can directly be attributed to paludal poisons evolved there, is a question we cannot definitely answer. It must be borne in mind, it was during the winter that these cases came under our observation. The water of the river was as cold as ice, for it was fed by the snows melting upon the mountains, through which ran its tributaries, and the water backing in from the sea at flood tide, coming as it did, direct from the northern ocean, was scarcely less cold than the fresh. It is hardly reasonable to suppose that the marsh, covered almost constantly with this water at a low temperature, could evolve paludal poison, no matter how crowded it was with the remains of animal or vegetable matter. There was never heat enough to afford the essentials of decomposition. There was never any unpleasant odor on or near the marsh, even when the tide was out and the surface exposed to the direct rays of the sun.

On several occasions, when called by business to the opposite side of the river, we took care to examine the soil and its peculiarities at such places where the swift current undermined the bank, and left a surface more or less perpendicular open for inspection. The depth of the soil was extraordinary, varying from twelve to eighteen feet. It was very dark and exceedingly rich, enabling the sand, with which it was mixed in the flower and vegetable gardens of the fort, to produce whatever was planted in great abundance. The soil could never have become dry, even at a distance from the river, high up on the sides of the mountains, for, during the rainy season, it became thoroughly saturated with water, and the underbrush covering it was so thick, and the trees so umbrageous, that the sun's rays or the winds of summer could scarcely be supposed to have any dessicating influence upon it. Soil of this nature, unprotected, exposed to a high range of temperature—a tropical sun, for instance—for some time, would unquestionably produce paludal poison; but here, where the thermometer, winter or summer, seldom indicated a temperature above 60 degrees Fahrenheit, the generation of miasmata was rendered extremely problematical. We never could satisfactorily explain, then, the cause of the occurrence of the fever at the fort, but, in reference to its presence in the town, we had but one theory to adopt—that it arose, in some way to us unknown, from the sand plain previously described.

This experience, we find, is not an isolated one. As far back as 1794, Dr. Ferguson, writing on the same subject, says: "The first time I saw intermittent and remittent fever become epidemic in an army was in 1794, when, after a very dry and hot summer, our troops, in the month of August, took up an encampment at Rosendaal, in South Holland. The soil was a level plain of sand, with perfectly dry surface, where no vegetation existed, or could exist, but stunted heath plants. On digging, it was found universally percolated with water to within a few inches of the surface, which, so far from being at all putrid, was perfectly potable in all the wells of the camp."

In a country where miasmatic disease is prevalent, and which is unusually level—where the plain stretches many miles, without a hill or valley to vary the landscape—no one may point out the exact spot at which the *materies morbi* is generated. It may arise at a long distance from where its presence is manifested, and with nothing to interfere with its transportation—no hill, or mountain, or forest, to check its advance—the wind may carry it to very remote and very different localities.

The physician, therefore, in the performance of the double trust confided to him—to cure and prevent disease—must not confine his investigations, if for a time they are fruitless, to the exact neighborhood in which this disease is found. A more extended search will probably reveal the hidden source of pestilence. This once discovered, the physician may never be at a loss to suggest the means by which it may be rendered at once and for all time innocuous.

Our tour of duty at Fort Umpqua was too short to enable us practically to investigate such surroundings as could in any way be associated with the cause of the occurrence of the fever. We have already given our reasons for believing how in one instance, in the town, the mischief was in some way connected with the exhalations which arose from the sand plain, but here fact ended and theory began. To make that theory intelligible to all, which was most satisfactory to us, we premise a short description of a form of periodic disease occurring in this country, at many places at high elevations above the level of the sea, and known as mountain fever. How closely this disease approaches the coast we do not know. It comes on sometimes gradually, sometimes abruptly, in perfect health, with a chill of various degrees of severity, followed by a high fever, accompanied by intense headache, violent pain in the back and acute suffering about the joints; very much resembling, taking the eruption out of consideration, the Dengue of the South.

(*To be continued.*)

ON CHOPART'S AMPUTATION.

By W. F. McNUTT, M.D., M.R.C.S.E., L.R.C.P.E., etc.,
~~Late U. S. N., Surgeon to S. F. Dispensary, etc.~~

In every systematic work on surgery, we find an operation sanctioned, recommended and described, for removing all the parts of the foot anterior to the astragalus and os calcis, and called "Chopart's Amputation." The object of this article is to show that the amputation never should have been, nor never should be performed, and that there are no circumstances or conditions of the patient, nor any rule in surgery, which will justify the surgeon in performing the amputation.

Perhaps some surgeons may at first thought recommend the operation on the grounds of conservative surgery, supposing that it is conservative surgery to remove diseased or injured cuniform bones by Chopart's amputation, rather than by Syme's, or Pirogoff's, or even to amputate above the ankle. If the treatment of a diseased or wounded organ or member by the surgeon, with as little loss of tissue as is possible to cure the diseased or injured parts, means conservative surgery, then certainly the removal, for disease or injury, of the anterior parts of the foot by Chopart's operation, rather than by that of Syme or Pirogoff, would be conservative surgery. And though Sir William Fergusson, in his lecture on "Conservative Surgery," states that he was the first to use the term *conservative surgery* in 1852, he does not define it. But from his lecture, and from the remarks we meet with daily on the subject, we would be led to infer that conservative surgery meant the cure of disease or injury, by the surgeon, with the least possible loss of tissue. But such is not "conservative surgery." Conservative surgery means, that the surgeon, in treating a disease or injury, should adopt such a course of treatment as would be the least hazardous to the patient's life, and that would preserve as nearly as possible the normal function of the diseased or injured part; not such a course of treatment as would be likely to effect a cure with the least possible loss of tissue.

We propose to show that by performing Syme's or Pirogoff's operation, or even to amputate above the ankle, to remove disease or injury of the cuniform bones, rather than remove them by Chopart's amputation, is attended with less risk to life, and gives a more useful leg, either with or without an artificial foot. Therefore, to remove the whole foot, in preference to performing Chopart's amputation, is conservative surgery.

Sir William Fergusson, in his lecture on conservative surgery, says: "Possibly in these days we have rather overlooked the vast merit of Hey's and Chopart's amputations." Possibly by a process of careless deductive reasoning one might come to such a conclusion; but by carefully watching the clinical history of a patient subjected to Chopart's amputation, it will be seen that there are no grounds for Sir William Fergusson's eulogy on the operation.

As a rule, the history of a case after Chopart's amputation is about as follows: A tilting downwards of the stump; a tedious, painful process of ulceration of the cicatrix; perhaps division of the tendo-achillis, (which produces no good whatever); and, after months' suffering and impairment of constitution, the patient is obliged to submit to Syme's or Pirogoff's operation, or possibly to amputation above the ankle, when the patient generally soon recovers his health, and with an artificial foot the limb is restored to almost its normal functions. Every surgeon who has had any experience with Chopart's operation—with the chances of having a tedious, painful process of ulceration of the stump—perhaps the division of the tendo-achillis—probably re-amputation when the constitution is in a condition anything but favorable to a good result—must feel that his patient runs a greater risk to life than though he had been subjected to Syme's or Pirogoff's operation, or amputation above the ankle. As to the comparative usefulness of the limb after the respective operations, either with or without an artificial foot, I am quite willing to submit the question to the unfortunate individuals who have been subjected to the different amputations, to the very high authority of Drs. B. F. Palmer and E. D. Hudson, our celebrated patent limb manufacturers, and to the surgeons who have followed the history of the cases after the different operations.

In a letter that I received from Dr. Palmer, dated Philadelphia, June, 1868, he says that he "prefers Pirogoff's or Syme's operation, or amputation above the ankle, to that of Chopart," but that he has treated the latter successfully.

At a regular meeting of the "*New York Medical Association*," Dr. E. D. Hudson remarked upon the value of Syme's amputation at the ankle-joint, in adaptation of an artificial foot, as follows:

"No amputation of the inferior extremity can ever compare, in its value to the subject, with that of the ankle-joint originated by Mr. Syme. Twelve years of experience with that variety of operation has afforded me assurance that it is not capable of being improved in its general character. It is scientific, practically of the utmost use, and subservient to the best interests and happiness of the patient.

"Mr. Fergusson avowed that he 'knew of no kind or style of amputation which deserved more high consideration; and, so far as the subject is concerned, it is one of the greatest improvements in modern surgery.' No other operation has resulted so beneficially and satisfactorily. The subjects of such an amputation scarcely realize their loss with a proper artificial appliance. They appear every way whole.

"The sensations of the stump are normal; the articular surface and thickened tissues are accustomed to the hardest service and to bear the heaviest burdens, which, with apparatus, enables the patient to engage in his accustomed walks and vocations with unabated naturalness and endurance. One gentleman, for whom I applied a foot, has walked thirty-five miles in a day, on a hunting excursion, while his companions did not suspect that he was otherwise than whole. So beneficent have been the results of this operation, as to have induced many a sufferer from congenital malformations, varieties of talipes, and troublesome Chopart operations, to demand it as an 'amputation of convenience.'

"It is an operation that has for its support the soundest principle of surgical economy. It retains, in addition to the entire length of leg, nature's foundation, the articular portion of a shaft of long bone, as a base of support. Its accustomed service is concurrent and coequal with that of the calcaneum, to sustain the weight and forces of the body which are reflected to it. To remove the calcaneum, and substitute the articular base of the tibia, is merely a change of place, not of function. A cogent reason in support of amputation of the ankle-joint is, that to the compacted hardened tissue of the lower termination of the tibia are transferred and united for a cushion the thickened tissues, which have effectually served to proteet the os calcis. The place of those tissues is changed; their accustomed function is unchanged and normal. When the change of base and healthy union of hard and soft parts are successfully perfected, the same condition and serviceableness of the end of the stump is gained as that of the natural heel. After a very short period of exercise, the sensations become perfectly natural, and the end of the stump as enduring as the heel of the natural foot.

"I have been led to take very great interest in, and to a persistent advocacy of Mr. Syme's method, by a regard for the humane principles of rational conservatism, and by the numerous cases of ankle-joint amputations, which have demonstrated to me the superior utility of that operation to any amputation of the leg, or any modification of the general one of Mr. Syme. Of fifty recent cases which have come to my hands for final treatment by mechanical means, not one has failed of a highly gratifying success. Both patients and surgeons who have witnessed their results, have been every way pleased with their exceeding benefit."

In a letter that I received from my venerable and respected friend, Prof. Willard Parker, dated New York, June 23, 1868, in reply to a letter that I had written to him on the subject, he says: "In my opinion, Chopart's operation should be abandoned. I have never seen a good and useful stump the result." He also states that he has never seen any "abiding good result from the division of the tendo-achillis." He says: "Hey's operation is both practical and useful; but instead of Chopart's, I should always recommend and employ Syme's amputation."

Having stated that Chopart's amputation should be abandoned, and having cited authorities to substantiate the statement, we will next proceed to show that, considering the foot as a piece of mechanism, Chopart's operation must necessarily fail, according to the laws which govern the mechanical construction of the foot.

Take the foot as forming an arch. The os calcis is one base, the cuniform and cuboid bones form the other, and the astragalus is the key, upon which comes the weight of the body. The tarsal ligaments prevent the arch from spreading, when the weight is upon the key. Perform Hey's amputation on the foot—viz., remove the metatarsal bones—and the anterior base of the arch is not disturbed; consequently, Hey's amputation is both a practical and successful one. But when Chopart's amputation is performed, the anterior base of the arch is removed, so that when the weight comes upon the key, the stump must necessarily tilt forwards and downwards, which brings the cicatrix in contact with the ground. At the same time the heel is tilted up—not drawn up by the contraction of the gastrocnemius muscle, as is stated in the books. Hence the reason why the division of the tendo-achillis in no way prevents the tilting up of the heel.

Again: take the foot as a lever. The gastrocnemius is the power, applied to the os calcis, or posterior end of the lever; the ground under the anterior extremity of the lever, or foot, is the fulcrum; while the body, the weight to be raised, comes upon the line between the fulcrum and power, making a lever

of the second order. Now remove all that part of the lever anterior to the weight, as is done in Chopart's amputation, and the fulcrum is directly under the weight. The lever is destroyed, and no amount of power applied to the os calcis will suffice to raise the weight. The foot no longer being a lever, it would be better to have the leg a little shorter than the other. But in the case of Chopart's amputation, it is actually longer, on account of the tilting forward and downward of the stump, and serves to increase the inconveniencies of the operation. We sincerely hope that surgeons will realize the inferiority of this amputation, in comparison with the other amputations of the foot, and that it will soon be abandoned. Cal. Med. Gazette.

SOME REMARKS ON THE MODERN TREATMENT OF DYSENTERY.

By JOHN SCOTT, M.D., F.R.C.S.I., F.E.S.L., Etc.,
Surgeon to California State Woman's Hospital.

The prevalence of diarrhœa and dysentery at this season of the year induces me to lay before the profession, in as few words as possible, the result of a large experience in the treatment of dysentery in a tropical climate. Of the *symptoms* it is unnecessary to speak, for they are sufficiently familiar to the practitioner; and of the *history*, it is only requisite to remark that wherever malaria prevails, or a disregard of sanitary laws exists, there dysentery will show itself; while, on the other hand, a proper attention to hygiene, improved drainage, the removal of filth from the vicinity of dwellings, and a plentiful supply of pure water, will speedily cause its disappearance. It will, I fear, be some time before San Francisco is so fully benefited by the rigid enforcement of sanitary laws, and till then diarrhœa and dysentery will doubtless contribute largely to swell the bills of mortality. Till very lately the treatment of dysentery has been eminently unsatisfactory, consisting mainly in the administration of opiates and astringents, with occasional aperients, general or topical blood-letting, and sometimes salivation. Not unfrequently the disease refuses to succumb to any or all of these remedies, and steadily progresses to a fatal termination; while in others a most imperfect recovery takes place, leaving the patient liable to constant derangement of the bowels from atmospheric changes, or the slightest indiscretion in diet. Fortunately we are now in possession of a treatment both speedy and effectual, and which can be relied on as capable of curing the disease as certainly as quinine does intermittent fever. I would not be misunderstood. I speak of dysentery either acute or chronic, uncomplicated with organic disease of the large viscera; for it would be absurd to suppose that if abscess of the liver existed at the same time it would be possible to cure the affection without the removal of the cause. Ipecacuanha has long and deservedly held a high place in the treatment of dysentery, but the doses in which it has been the habit to administer it, and its usual combination with opium and astringents, have prevented it from exercising its specific effects on the system. To Mr. Docker, Surgeon in the British army, we owe the important discovery that ipecacuanha, to be used successfully, must be given in large doses, and the success of the treatment introduced by him was evidenced by his losing one only out of 53 cases, while stationed with his regiment in Mauritius where dysentery is endemic. It was, I think, in 1857 that Mr. Docker first explained his views to the profession, and by 1860 his practice had become universally adopted in British-India. Under the old system of treatment the mortality among Europeans in Bengal amounted to 88.2 in the thousand, while in 1860 it fell to 28.87 in the thousand. In Madras, under the old treatment, the mortality was 71 per thousand; but treated with the large doses of ipecacuanha, it has fallen to 13.5 in the thousand, or less than 1½ per cent.

The treatment enjoined by Mr. Docker was this: The patient having been put to bed, half a drachm of laudanum was given in a draught with the object of quieting the system, and inducing a greater tolerance of the ipecacuanha which followed. After a lapse of an hour a mustard sinapism was placed over the epigastrium, and one drachm of powdered ipecacuanha, rubbed up with an ounce of mucilage of gum arabic, administered. The mustard sinapism was kept on from 30 to 40 minutes, and perfect rest enjoined on the patient, no food or drink being allowed for three hours afterwards. A marked relief from pains and tenesmus was speedily noticed, and sometimes a complete recovery; but if any straining or mucous discharges should continue, the ipecacuanha was repeated at intervals of twelve or twenty-four hours, as might be required. A vegetable tonic, such as infusion of gentian with dilute sulphuric or nitric acid, with sometimes a little opium added to it, was all that was necessary to complete the cure. Soon after reading Mr. Docker's statements and cases, I adopted his treatment with the most marked success, but I was induced to modify it for the following reasons: I found that the previous administration of the opiate had rather the effect of increasing than of allaying the tendency to emesis, and I often found it necessary to repeat the ipecacuanha, at intervals, for two or three days before a perfect recovery took place. Now, it is not difficult to administer *one* dose of ipecacuanha or perhaps a second, but if after this you require to repeat it, the patient manifests so much repugnance that he is with great difficulty persuaded to take it, and will almost certainly reject it soon after. Believing also that opium exerts an injurious influence in arresting the secretions of the liver, and prolonging the congestion which is invariably present in such cases, I have been in the habit of adopting the following treatment with a success which leaves nothing further to be desired:

In acute dysentery, the patient is put to bed, and two pills, containing 20 grains of calomel and 3 grains of extract of conium are administered, the patient being allowed only warm weak tea or a little barley water to drink. This dose acts entirely as an evacuant, first producing large bilious stools, and if much congestion of the liver is present, vomiting may take place also. It afterwards acts as a sedative, and markedly allays the tormina, which is so distressing to the patient, while the large dose in which it is prescribed insures its rapid passage through the alimentary canal *without producing ptyalism in any instance.* From eight to twelve hours afterwards, a mustard sinapism is placed over the epigastrium, and the following draught given, viz:

Powdered Ipecacuanha, 1 drachm.
Comp'd Tincture of Lavender, 1½ drachms.
Mucilage Gum Arabic, 6½ drachms.

The patient is enjoined to remain perfectly quiet on his back, not to take either food or drink for three hours, and to repress every inclination to reject it. The patient should not be informed that ipecacuanha has been given; and I have known the dose retained, without any vomiting whatever. More commonly, however, vomiting of a slight, but not distressing character, takes place, after an interval of from thirty to forty minutes, when diaphoresis generally sets in; and after some hours, several alvine evacuations of a perfectly healthy nature, and unattended with straining or mucous discharges, make their appearance, and the patient is entirely relieved. The

mustard should be kept on from thirty to forty minutes, and this, with the addition of the tincture of lavender, greatly aids in helping the stomach to retain the medicine, which is intended to act downwards, instead of upwards. Should nausea continue some hours after the draught, a dessert-spoonful of brandy in soda water will effectually allay it. For a week afterward, the patient should be restrained to a diet of beef tea and toast or rice.

In a case of pure dysentery, uncomplicated with visceral disease, the above two doses of medicine will generally cure the case, and neither opium nor astringents in any form will be needed. Indeed, I regard opiates and astringents in acute dysentery as not only useless, but pernicious; and I consider it a matter of supreme importance that their use should be dispensed with entirely. A repetition of the draught *may* be necessary after an interval of twenty-four hours, if any kneading or mucous discharges are still present; but I would warn the practitioner not to interfere with the laxative effects of the ipecacuanha, which may continue for a short time, provided the discharges are entirely natural, and not frequent. There is no doubt ipecacuanha, in large doses, acts beneficially in relieving the engorgement of the mucous membrane of the intestines, by relaxation of the capillaries, and in this way also promotes a free discharge of bile, while, at the same time, it produces a free action of the skin, and acts as an evacuant of the most unirritating and effectual character.

In the dysentery of children, the above treatment is as effectual as in the adult, and I can amply vouch for its power in rescuing the little sufferers from apparently certain death, in cases where all previous treatment had been unavailing. In children especially, I have noticed the absolute necessity, in bad cases, of preceding the ipecacuanha by a large dose of calomel, pure and simple; and if to this is added the soothing effects of a warm bath, the child will generally fall asleep, and be already considerably relieved before the ipecacuanha is administered, as it ought to be six hours afterwards. A small dose of calomel will have an injurious and irritating effect, and is therefore to be avoided, especially as the larger dose secures the patient against its specific effect on the system; and one can with perfect safety administer to a child so young as a year old 10 grains of calomel, followed by 10 grains of ipecacuanha. This may seem *bold* practice—10 grains of ipecacuanha to a child of a year old, and 60 grains to an adult—but I can assure my brethren that it is both a *safe* and effectual practice, if they will but put it to the test, *under the restrictions laid down as to the mode of administration.* My friend, Dr. Shorb, can testify to the fact that it is possible to give to a delicate and sensitive lady, greatly reduced by illness after confinement, one drachm of ipecacuanha, without producing any but very slight emesis, while it, at the same time, removed as if by magic an attack of diarrhœa, which was exhausting her.

Before concluding this article, I would allude to the fact that, in all diarrhœas of an obstinate character, and especially in those which have a dysenteric character, ipecacuanha is simply *invaluable.*

ON RHEUMATIC IRITIS.

By WILLIAM H. DAVIES, M.D.,

Assistant Surgeon to the California State Woman's Hospital.

It may be said that this subject has already been exhausted, and that the many eminent writers of the present day have told us all that can be known regarding this affection, yet I may be permitted to offer a few suggestions of a thoroughly practical nature, the result of careful and impartial observation; and, although I have no new remedies to propose, yet I hope to show the peculiar advantages possessed by some remedial agents over others more generally used. It is of the utmost importance that, in an affection of the eye so painful, and tending so speedily, if unchecked, to produce permanent damage, that we should be able at the very outset judiciously to choose our course of action and pursue it steadily, even when the result appears more than doubtful, for perhaps there is no disease of the eye so trying to the patience, or presenting more discouraging symptoms, even when amendment is really taking place.

In our armament of remedial agents, we find calomel, opium, leeches, blisters, belladonna, atropine, etc.; let us try and choose from these judiciously, and show which are most serviceable. And, first, of calomel: In acute iritis, I should strongly urge the use of calomel, combined with a small quantity of opium, to be continued only until its specific effects can be slightly perceived; then stopped and used no more. The habit of resorting to calomel, during the progress of the disease, whenever slight accessions of inflammation manifest themselves, cannot be too strongly condemned. While our patient is being brought under the influence of calomel, we must not forget that in the use of atropine and the judicious application of leeches, we possess remedies of vast power, which cannot be too quickly brought into action.

I would advise the use of atropine from the very outset—at first in the proportion of one grain to the ounce, and later in two-grain solution, but never beyond that strength. I am aware that eminent authorities advise its being employed even to the strength of six grains to the ounce, but I can conceive no practical good to be attained, as I always find the two-grain solution capable of procuring free dilatation of the pupil within a reasonable time, and I consider it a good rule always to employ the minimum quantity that will produce the desired result. The solution should be used at least once daily, and oftener if the pain be severe, as it will be found vastly beneficial in relieving suffering.

Leeches should be used whenever the pain is unusually severe, and they will generally afford marked relief, particularly if applied near the inner canthus. They may be repeated as often as necessary, but never more than three or four need be applied each time. The bleeding may be easily kept up by the use of a poultice, made of bread soaked with strong poppyhead liquor, and applied warm. This poultice I use almost constantly during the first week of treatment, as it serves a double purpose, that of affording relief to the pain and protecting the eye from the influence of light. This is a precaution of the greatest importance, for at least a fortnight after the occurrence of the attack.

After the calomel treatment has been discontinued, the ordinary remedies for rheumatism may be given; but of all these, perhaps we possess none so steadily reliable as iodide of potassium. Great care must be taken to prevent constipation of the bowels, and saline medicines will be found peculiarly suitable.

Opium I never use in this affection, except so much as is necessarily given in the first stage, combined with calomel, and in the form of poppyhead poultice. I consider its employment unnecessary, because in atropine and leeches we possess the means of controlling pain; and I further consider it contra-indicated, from its tendency to contract the iris and increase constipation.

There is still a point, and an essential one, too often overlooked in the treatment of these cases, particularly if the disease be chronic. I refer to the condition of the eyelids. In

the majority of cases, it is necessary to inspect them almost daily, as a granular condition, particularly of the upper one, frequently exists, and will utterly defeat all our efforts to cure our patient, if neglected. The cautious use of the sulphate of copper crayon, or, what is still better, a crayon composed of the sulphates of copper and alum, will place us in command of the case in a remarkably short time. I say cautious use, because, if applied too roughly, or injudiciously, we simply defeat our object and increase inflammation.

ABSCESS OF TESTICLE, OF LONG STANDING — DISORGANIZATION OF THE ORGAN — REMOVAL BY CASTRATION.

By J. CAMPBELL SHORB, M.D., San Francisco.

By surgical writers, abscess of the testicle is generally regarded as a disease of very rare occurrence. Taking into consideration the exposed position of the scrotum, the many injuries that the testes must in various ways receive during life, and the frequent inflammatory affections of the parts, it is indeed singular that abscess of the organ is so rare. It has, no doubt, been wisely ordered that the organ upon which the procreation of the human family depends, should in a great measure be protected from the dangerous results of inflammatory mischief. We are at a loss to explain in any other way the immunity the testes enjoy from the fatal consequences of violent injuries.

The history of the following case is so peculiar in many particulars, that a full recital will scarcely fail to prove interesting, perhaps instructive. W. H——, ætat 33 years, living now in Nevada street, was born in Ireland, where his mother still lives, upwards of 60 years of age. His father was a strong and healthy man, who died of ship fever at an advanced age. This man has always enjoyed excellent health, and there is nothing in his present condition or past history to awaken a suspicion that there is any scrofulous or syphilitic contamination of his system.

Some three years ago, he was riding a fractious horse, which threw him violently against the horn of the saddle, injuring the left testicle so severely, that fainting came on, and he fell to the ground. For an hour or so, the pain was very acute, accompanied with nausea and vomiting; but it gradually subsided, and he was able on the same day to resume his work, which was that of a glass-blower. Five months passed away after the receipt of the injury, and the testicle manifested no symptom of disease. There was nothing to call especial attention to the part but an occasional pain, of a flitting, trivial character, not sufficient to induce him to give up work. At the expiration of probably six months after the injury, he ceased working at his trade, and was employed as an ordinary laborer at the Sugar Refinery. Here he accidentally received a slight blow on the same testicle, which gave rise to the most intense suffering, lasting a day or so, after which he observed the testicle began gradually to enlarge, until it attained the size it had at the time of the operation—four inches in its long, and two and three-fourths inches in its short diameter. He consulted some physician in reference to his trouble, and was told it was hydrocele, and advised to wait till the water had accumulated to a sufficient extent to warrant surgical interference. Impatient of delay, and dissatisfied with the advice of his family physician, he procured other attendance, and was seriously mercurialized without deriving any benefit from the treatment. He was recovering from the effects of this mercurialization when he came under my professional charge, which was late in the winter of 1866, or early in January, 1867. I found it a matter of great difficulty to pronounce upon the exact condition of the organ, and felt some hesitancy in declaring it hydrocele, as the tumor was very hard, more or less inelastic, and by transmitted light no translucency was visible. I was rather inclined to adopt the view that the enlargement was due to the effects of chronic inflammation, and upon this theory based the treatment, which consisted in strapping the testicle, subsequent inunctions with iodine ointment, and iodide of potash internally in doses of five grains four times a day. The vesicle, strapped or not, was always supported by a suspensory bandage.

Some two or three months passed by, without my being able to perceive any good result from this plan of treatment. While health remained excellent, no decrease in the size of the testicle occurred. I commenced to suspect that the case was one of encysted hydrocele, planted on the surface of the epididymis or the body of the testicle, which had gradually pushed the serous investment of the gland in front of it, developing enough inflammatory action in the sack to promote union between the tunica vaginalis and the tunica albuginea, giving to the tumor its peculiar hardness and density. He came to my office one day when a medical friend happened to be there, whom I asked to examine the case. He thought it was hydrocele, and plunged an exploratory trocar into the organ at the most dependent part, hoping by this means to clear up the obscurity of the disease. A few drops of blood escaped, but no serous fluid.

Sometimes, parts filled with the products and results of chronic inflammation yield wonderfully to the influence of absorption, and rapidly return to a condition of health after the introduction of such an instrument, and I hoped such an event would occur here. The parts, however, remained in the same condition, and, after waiting some time, I resolved to pass in an exploratory trocar in several places in the organ, hoping somewhere to strike a basin of serum, and thus remove any doubt in reference to the case. The first introduction of the trocar succeeded in bringing away several drops, which I was satisfied was serum, and I resolved to operate in the course of a few days by passing in a large trocar, drawing off the fluid, and injecting the sac with tinct. iodinii composita. Dr. Hoff, of this city, was kind enough to accompany me on this occasion. I told him of the result of the exploration made some days previous, and passed in a large trocar near the cicatrix left by the previous operation, but not a drop of serum escaped. Some slight hemorrhage ensued, which ceased in a few minutes, and the case remained in even more obscurity than before. Its size seriously compromised his usefulness, and the pain, though not of a severe character, was enough to keep him constantly depressed in spirits, and lead gradually to the general breaking down of energy and health. The treatment which seemed proper under the circumstances had been tried in vain, and nothing was left to be done but the removal of the organ.

On July 1st, several days after the introduction of the trocar, assisted by Dr. Hoff, I performed the operation of castration. I divided the skin in front of the tumor, by an incision which commenced near the external abdominal ring, and ran down to the most dependent portion of the scrotum. At the lower part I found no adhesions, and was able to dislodge this end of the organ by enucleation, but at the upper portion very strong adhesions had formed between the tunica vaginalis propria and the tunica reflexa, and it was with some difficulty that these were dissected and broken up. The cord was hypertrophied, and its peculiar anatomical elements transformed, probably by some inflammatory action, into a large, solid, tendon-like cord, in which no duct could be discovered.

The spermatic artery, however, remained. The edges of the incision were brought together, the ligature around the cord carried out at the most dependent portion, and the wound dressed with cold water dressings. During the night which followed the operation some little hemorrhage took place, which did not recur, and the case went on remarkably well, the ligature coming away on the seventeenth day, leaving the incision almost entirely healed, the scrotum healthy and reduced so much in size on the left, as scarcely to be distinguished from the right side.

The diseased testicle was examined at my office, by making a vertical incision throughout its entire extent. All the proper tissue of the testicle had disappeared. The greater part of it was composed of a dense and reddish in places pearly fibroplastic matter, which extended from the surface deep downwards, close to the mediastinum. All trace of the lobuli was lost, and dimly through the hardened mass might be discerned what appeared to be the remains of the vasa recta, stretching towards the rete testis, or rather towards that portion where, in healthy, normal conditions, the rete testis is found. Near the centre of the diseased mass, a little towards the superior portions of the mediastinum, was an abscess, with well defined boundaries, which contained an ounce of thick, creamy pus, devoid of smell.

The presence of the abscess here cannot in any way be attributed to the use of the trocar. Its occurrence after a puncture would have been marked with a slight rigor and some constitutional disturbance. Besides, the location of the abscess was in a portion of the testicle entirely different from that at which the trocar was introduced.

Looking upon the complete disorganization of the testicle, and the phenomenon of an abscess in the centre of the transformed tissue, the question naturally enough arises, which was the cause and which the effect? It is scarcely reasonable to consider them both the joint effect of the injury originally sustained by the organ. Sarcocele is certainly a more common affection of the testes than abscess, and in this case disorganization, under the influence of inflammatory action, may have been accomplished before the abscess formed. But it is more probable the abscess was developed before any other change took place in the substance of the organ, and, though enclosed within strong fibrinous parietes, its presence may have set on foot a slow combustive process, under the action of which the transformation of tissue was accomplished. If the disorganization really preceded the abscess, it is difficult to understand how the whole organ did not liquefy into pus, point, and discharge its contents; for, the vessels being obliterated, the conditions for limiting the diffusion of pus could not possibly have been present. The cyst must have been formed from products derived from healthy vessels, and hence the conclusion that the abscess was the primary lesion. The collection of pus must have been quite close to the surface at the outset, in a position where, perhaps, careful examination would have revealed its presence, and where the timely use of a trocar or bistoury might have saved the testicle.

The disease of this organ had not at all impaired his virile power, or diminished his venereal appetite, and the fact that his wife has been *enciente* for four months points plainly to the existence in the right testicle of the impregnating faculty. Conception took place in this instance long subsequent to the period at which the left testis must have been completely disorganized.

At the present writing, twenty-four days since the operation, the wound is completely healed, and the patient ready to resume his work.

REPORT ON THE SMALL-POX HOSPITAL OF SAN FRANCISCO.

Read before and adopted by the Medical Society of San Francisco, and presented to the Board of Supervisors of the City and County of San Francisco, August 3d, 1868.

To the President and Members of the San Francisco Medical Society:

GENTLEMEN:—Your committee appointed to examine into the San Francisco Small-pox Hospital, and its adaptation to the public requirements at the present time; as also to suggest the ameliorations which may be introduced with advantage into the present system, have the honor to present the following statement:

The most opportune moment to obtain reform in hygienic institutions, is when the invasion of an alarming epidemic disturbs the public comfort. Such alarms rally the united efforts of individuals in their own behalf, relax the constriction of the public purse, and thus obtain enduring and permanent provision for the public benefit. An emergency like the present, in the wide-spread prevalence of small-pox, appealing to the health, the legal rights and social affections and duties of every individual, elicits and sanctions an earnest enquiry to satisfy public anxiety, into the mutual privileges and reciprocal rights which exist between the individual and the public; the extent to which the latter may interfere with the former to protect the general health; and in the event of public or legal interference, to what extent the public is bound to provide resources as a substitute for those that it may invade or disturb.

On these points, there is perhaps no community more sensitive than that of San Francisco, and the published laws in regard to small-pox have not contributed to allay public solicitude.

It is however, distinctly to be premised, that no criticism which may be made in this report upon the measures adopted by the city authorities to afford relief against small-pox, are intended in an invidious or reproachful spirit.

The assurance the committee feel in the liberal and generous intentions of the public, as expressed through its elected representatives, gives confidence to advance such propositions, as are dictated by reason, equity and philanthropy, will be manifest to every mind, and will be cheerfully adopted by the city, with all the promptness the occasion requires. It is only through such united and harmonious action, that valuable results can accrue.

The Committee have visited, as instructed by the Society, the City and County Small-pox Hospital. It is situated on the Alms-House farm lands, about five miles from the Plaza. The construction of the building, as well as its elevated situation, secure for it the most perfect ventilation. Erected at a cost of about $10,000, it proves that the city desired to provide generously for the public want, though the present emergency has demonstrated that the provision is insufficient. The Hospital consists of four rooms, besides those for general administration purposes, each room being 20x24, and calculated to receive each six, or in all, twenty-four invalids.

These rooms are furnished with good wooden bedsteads; all the outfit of the house appeared good and sufficient. The attendance, one principal matron, and three assistants, was excellent. The provisions were of the very best quality, and the Committee found the general service of the hospital, though the visit was unannounced, and very early in the morning, diligent and in order. With the single exception, that a quantity

of off-cast bedding and clothing was strewed neglected near the building, the Committee can offer unqualified praise for the conduct of the institution, according to its capacity and its system. Off-cast apparel and bedding, often of excellent quality, and generally in small-pox hospitals, destined for destruction, are now by recent improvements of the Hospital Committee, carefully disinfected and preserved.

With this, however, their commendation must cease.

There were twenty-three patients. Of these one only was a female, and hence she occupied one entire ward. To provide for the others, it was necessary to place stretchers between the bedsteads; the three male wards were therefore overcrowded, four or five patients were to arrive the same day. These facts prove the hospital too small to meet the contingency of an epidemic, even at its incipiency.

If the system be wrong, and the building in which the wrong system is used be entirely too small, all administrative care, expense and fidelity, must necessarily fail.

There is no sitting-room, or place of resort for convalescents. Their discomfort can easily be imagined. Many patients were collected in one room, even to close crowding. The proper treatment of small-pox peremptorily demands entire isolation of the patients. The different stages of disease, with its modifications in individual cases, cannot fail to produce a deleterious effect upon the special diseases. The emanations of the one patient cannot benefit the other; but, aside from the general disagreeableness, must exercise a contaminating influence, and infallibly aggravate the milder forms of disease. The very idea of this universal bathing of the patients in each other's effluvia, is horrible and revolting. The poor are not less sensitive to this disgust than the wealthy, and hence arises the odious name of *Pest*-house; the antipathy to enter it, the moral prostration and mental despair, oftentimes equivalent to a death-warrant, which add their influence to depress still more the corporeal energy, when already the material prostration threatens to prove overwhelming.

There is no disease which in itself so impressively dejects the moral force as small-pox, nor is there one from which the encouragement of hope, so potent to cure, is more ruthlessly plucked away.

By the present mode of applying the law for the sequestration of persons sick with small-pox, the public obtains isolation, but the unfortunate victim does not; he, on the contrary, is hurried from his comparative seclusion, into the very cauldron of the disease. The law is one-sided, it protects the public, but sacrifices the subject, as though the disease were criminal, and the pest-house the punishment. The removal to a small-pox hospital is not an alleviation; it only heaps fire on the devoted head. The law offers charity to the public well, but it is the public sick which most urgently demands the intervention. In the excitement of an epidemic, the contaminated are deserted in the general zeal of the uncontaminated to obtain immunity.

The antipathy to enter any hospital is well recognized, but the extreme objection to be taken to a small-pox hospital is attributable to the latent perception of the discrimination, that while the General Hospital and Alms-house offer a tender and philanthropic care for those who have performed more or less well their duties according to their social position, and express sympathy and humanity, the other implies a banishment and a desire to retreat from obligation. The obloquy of the pest-house is as much dreaded as the fear of the pest. It is in this distinction, chiefly, that the extreme objection to the small-pox hospital exists. This objection, carried sometimes with a revolutionary spirit, defiant of all local enactments, and sustained by the great radical law of the sanctity of the domicil from forcible intrusion, threatens to defeat the value of houses of seclusion to arrest the propagation of variola.

Opposition commenced by some is quickly propagated to all, and local enactments, however well intended, and however useful in their application, in many instances are subject to be resisted by that spirit of equality and imitation of privileges incident to a republican government. The authorities, cognizant of this truth, seek only to urge, but not to enforce, laws of sequestration; for the dignity of the law requires that it should not be defeated in its application.

But society is only partially composed of the objective and the reticent. Under the scourge of variola, as in all the great trials of life, there are those noble characters in whom disinterestedness and devotion shine forth more brightly in proportion to the severity of the test to which they are subjected. There are the noble disinterested, who insist upon isolation when the fell disease assails them; there are the noble devoted, who will not be separated from those they love. These are the ones, and the poor like the rich are among them, whose rights and privileges call loudest for the guardianship of the law and the protection of public institutions, founded and maintained, at least in part, from the public treasury. These are the beings who ennoble mankind; these, nature's noblemen, are the wealth of humanity. Happily, as we believe, being in the majority, they are the charmed bond which rivets indissolubly the social union, and makes dear the compact. These sentiments need not be violated when a fearful malady makes its invasion. The present system of management in variola unintentionally outrages the tenderest sympathies of the human heart. The interests of life need not stand up in opposition to the sentiments of human nature, nor the associations of both be rudely ruptured or disregarded. They may be reduced to harmonious co-operation by the introduction of an exalted philosophy in the cultivation of the public mind, perfect confidence may be restored, cheerful assent to administrative measures may be obtained, variola may be reft of its terrors, and all the interests and affections of society be reconciled in the united and beneficent effort to crush out the contagion.

The nature and extent of the subject would invite us to amplify; many episodes germane to the question could be made; but your committee prefer to reduce the argument to as limited a space as the vital importance of the discussion will allow. We propose, therefore, to elucidate, as briefly as may be, the reformation and the ameliorations which are called for and are practicable in the management of variola.

To this end, two leading things are requisite. Firstly: to cultivate in the public mind a proper intelligence, and an enlightened view of the nature of public intervention to suppress the malady. Secondly: to provide a public retreat—a hospital or hotel, for isolation, to meet, to satisfy and to correspond with the general enlightenment and instruction obtained. We contend that both objects are easily attainable; by a simple diffusion of the knowledge in the first place, and secondly the proper construction of a model small-pox institution.

It would be desirable to make the public comprehend that a Variola Asylum is not a pest-house, and abandon the latter term to the vulgar illiterate, who always delight to depress rather than elevate the character of things, by some invidious epithet. Nor is the Variola Asylum an alms-house for paupers. It is a sanitary retreat, where all persons, old and young, rich and poor, may take refuge, in behalf both of themselves and their neighbors. If restrictive enactments are promulgated,

the public will understand that they are not applied as police coercion, but as a humanitarian benefit. But then, in return, comfort, care and treatment, equal or better than that left behind, should be granted to those who leave their home for the public welfare. In a well organized public institution this seldom fails to occur, for a residence constantly supplied with all the improvements of science and art must excel another in which they are hastily brought together for an emergency.

When a variola asylum, inaugurated as we shall presently suggest, shall be erected, and the public instructed that a hotel is provided in which isolation is perfect, apartments at prices according to the ability of individuals to pay, as well as separate rooms for the utterly indigent, at the public cost, then will a public reaction in feeling be formed. As much alacrity to obtain admission will be manifest as there is now loathing and repugnance. Once establish a commendable refuge, and the sick will gladly resort there, for it is well known that hotels and boarding houses are not kept for invalids, and the favor they receive is soon exhausted.

While we believe that apartments in well ventilated buildings may be kept completely disinfected, and that the use of disinfectants will restrict the disease, and hence that forcible sequestration is seldom necessary, yet it is true that for many reasons as perfect isolation should be obtained as possible. The most important of these reasons is the difficulty to ensure their application. Recklessness, or ignorance, or false economy cause them to be neglected. But when it is inculcated that there is a resort where these desiderata cannot be neglected, the general objections will cease, and policemen, yellow flags and long debates on rights and wrongs become unnecessary.

The elegant asylum for the insane at Stockton, maintained by the State, without regard to cost, is surrounded with acres of farm land and adorned with gardens and promenades. Trees for shade and flowers to court the fancy and appease the ravings of distracted minds abound. All appliances for health, comfort, and even luxury, are used to win back to reason the wandering intellect. Here rich and poor who have become dangerous to others and helpless to themselves find refuge. But this asylum is not regarded as pauperdom; and the public views admission to it with sympathy, as one of the sad necessities of life. It is not accompanied with a sickening sense of loathing antipathy.

But is not the contagion of variola more dangerous to the public than the ravings of the insane? Is not the sequestration of the one as imperative a necessity as that of the other? The peril from the insane extends to a few. The danger from variola is universal. Why then should not variola be submitted to the same precautions as insanity—be isolated under similar regulations—and the variola asylum be regarded with equal respect, and be surrounded with the same amenities.

The committee would not recommend one cent of extravagant expense, but certainly would favor any outlay of money necessary to attain an object of so great magnitude; a capital commensurate with the fact that a city of 120,000 inhabitants, one of the centres of the world's commerce, is every day exposed to new importations of the disease, should be invested.

A shipload from Asia, the supposed birthplace of variola, might at any moment be landed on our shore. Other countries are liable in like manner to invade the city. If no similar institution exist elsewhere it will be to the honor of San Francisco to have created the first variola asylum on a truly humanitarian basis.

To the possible objection that such an epidemic may not occur again for years, and the establishment would lay untenanted, we reply, better it should be idle and empty than crowded with the sick and dying. Better to lose the interest on capital and current expenses for years than be destitute of its relief in the first days of an epidemic invasion.

Without anticipated precautions hundreds of citizens perish before the desired assistance can be offered, and then in the haste of the panic, extraordinary funds are wasted for only inefficient or badly built constructions.

Arsenals fully supplied with stores of arms and ammunition are continually maintained by States in time of peace, to be in readiness for the hour of war. What capital invested, then, is too great in anticipation of such an enemy as variola?

This institution will be however self-paying and give a dividend for the investment. The charity is only to the destitute. Other tenants, in paying according to their capacity, would in part or entirely sustain the asylum. The income from pay patients would be large, for as it is not the obligation of the community to provide for all cases of small-pox indiscriminately, only the destitute would be at the public charge; although the introduction of free patients would be encouraged in a spirit of large and liberal benevolence.

In view of all these considerations your committee propose that this Society recommend to the Board of Supervisors, for their adoption, the creation of a variola asylum, in which the following indications may be practically inaugurated:

1. As perfect isolation is desirable, that no two patients occupy the same room.
2. That accommodations equal at least in their appliances and comfort to those abandoned, be supplied to every inmate.
3. That the destitute be received free of charge, but the non-destitute pay.
4. That the "Pest House Rules and Regulations," dated June 17th, 1868, be repealed or amended to allow private or pay inmates to have their own nurses free from all other obligations of work. That clothing and bedding, after having been thoroughly disinfected, be returned to their owners.
5. That a special building, or suitable apartments, be destined for convalescents, and that the cured be returned to the city in a special vehicle.
6. That special rooms exist for small children adapted to their requirements, in which parents may feel satisfied to leave them in security—as in Paris the "créche" is established where working women may leave their young children during working hours.
7. That ten acres of the alms house farm be consecrated to the use of the variola asylum, admission to which and exit from which premises be subject to quarantine regulations.
8. That the present small-pox hospital, on the alms house farm, be converted into a dwelling for convalescents, and that a Variola Asylum be forthwith constructed on a plan and on a scale commensurate with the urgent demands of the city.
9. That the variola asylum be under the charge of a resident physician, whose whole time shall be devoted to the interests of the institution.

PEST HOUSE RULES AND REGULATIONS.

1st. No private nurse will be permitted to wait upon a patient without a special permit from the Chairman of the Hospital Committee.

2d. Nurses so admitted will be required not only to attend the patient for whom he is employed, but also to assist, so far as may be necessary, the regular nurses in the discharge of their duties.

3d. No nurse will be permitted to leave the establishment without first having taken a plunge bath and made an exchange of clothing, leaving such articles behind as were worn whilst in attendance on a patient.

4th. All private nurses to be under the entire control of

the Visiting Physician, and in his absence, nnder the nurse of the establishment.

5th. All articles brought into the hospital for use of patients, (particularly liquors) to be deposited with the Physician or his representative, and to be dispensed only under his direction.

6th. All articles of value, including money in possession of patients, to be deposited with the physician or other properly authorized person to receive them, who will give a receipt for the same, and the property be returned to the owner or other duly authorized person, on demand, accompanied by the receipt.

7th. All bedding, clothing, etc., worn by or taken to the hospital by the patients, must be left and destroyed by the proper authorities.

8th. The Chief Nurse will see that the above Rules and Regulations are rigidly enforced; and to report at once any violation of them to the Chairman of the Hospital Committee.

R. Beverly Cole, M. D., *Chairman.*
John Harrold.
Chas. H. Stanyan,
Hospital Committee.

San Francisco, June 17th, 1868.

In order to shorten description and details, the committee subjoin a sketch of a plan to give an idea of a variola asylum. Such an edifice would serve as a commencement and could be erected in a short time. In the future other separate buildings could be raised. Although the plan covers a considerable area, it is not expensive; the centre building only being of two stories to afford residence for the physician; but when hereafter a separate house will be built for him that second story will offer excellent rooms for patients. In this sketch, however, the principles of isolation, immediate and thorough disinfection, baking facilities and accommodations for nurses or devoted friends are carefully provided for.

Children would require a building apart and modified in its interior construction to suit their requirements.

With this general outline your committee conclude, hoping that, though the past may be beyond remedy, all future cause of discontent may be forestalled by a radical reform.

Arthur B. Stout, M. D.,
H. Gibbons, Sen., M. D.,
A. G. Soule, M. D.

San Francisco, July 28, 1868.

SARRACENIA PURPUREA AS A REMEDY FOR SMALL POX.

By W. F. McNUTT, M.D., M.R.C.S.E., L.R.C.P.E., etc.,
Late U. S. N., Surgeon to S. F. Dispensary, etc.

The inquiry on every hand at present seems to be: What is the best preventative of small-pox? And what is the best treatment if one does get victimized? Is there no royal road to cure? Cannot the horrid disease be "stamped out?" Much has been said and written on the subject lately, and various are the theories propounded for the prevention, cure, and stamping out of the disease.

As for the treatment, perhaps no remedy has been so lionized by the popular journals of the city as the Sarracenia purpurea, purporting to be brought for the first time before the profession by Dr. F. W. Morris, of Nova Scotia, he having obtained it from "an old Indian woman."

I have been repeatedly called upon by gentlemen of this city, who knew that I had formerly practiced medicine in Nova Scotia, for my opinion of Sarracenia purpurea as a remedial agent in small-pox, and was strongly urged to give publicity to the facts in regard to its introduction to use by Dr. F. W. Morris. I considered it unnecessary to do so, however, and would not now occupy valuable space in your medical journal, had its use not been strongly recommended in the previous number by a member of the profession.

The story went in some of the popular journals that the Indians kept it in their camps, and found its use both a preventative and a cure, whereas it is a patent fact that no disease that ever followed the pale face to Nova Scotia proves so fatal to the Indian as the small-pox. When the small-pox makes its appearance in the neighborhood of the Indians, they never stop to try the virtues of Sarracenia purpurea, either as a prevention or cure, but immediately pull up their stakes and give the small-pox a wide birth. So much for the "old Indian woman."

At the time of the announcement in 1861, by Dr. F. W. Morris, of the specific effects of Sarracenia purpurea in small-pox, the disease was raging in the whole Province, but more especially in Halifax. The Medical Society at once appointed a committee for the purpose of thoroughly trying the remedy, and of investigating the cases that Dr. F. W. Morris had claimed to cure by the new medicine. In the meantime many of the members of the society commenced administering the drug to their patients. The committee in due time reported the result of their labors. They were unanimous in their opinion that Sarracenia purpurea is of no value as a remedial agent in the treatment of small-pox. The other members of the society also came to the same conclusion. The committee also found that the cases which Dr. F. W. Morris had reported as cured, were many of them badly marked, and that there was no evidence that any of them had been shortened or modified by Dr. F. W. Morris' treatment. My friend Dr. Davies, now of this city, was in Halifax at the time, and formed one of the committee. The consequence was, that Dr. F. W. Morris was expelled from the Medical Society for unprofessional conduct, and for the publication of false certificates of cure.

Dr. Morris then associated himself with a noted character who called himself Professor Lane, and they two cried martyrdom, so that a few, out of sympathy for these professional martyrs, continued to take Sarracenia purpurea, as administered by Dr. Morris and Prof. Lane. Beyond that it ceased to be used in the Province. So much for Dr. F. W. Morris.

In Rainsford Island Small-pox Hospital, Boston harbor, in 1863 and 1864, Sarracenia purpurea was thoroughly tried under the superintendence of Dr. George E. Underwood. It was then condemned as useless in the treatment of small-pox. My friend Dr. Powers, oculist, of this city, was physician at the hospital at that time.

Two species of this plant—Sarracenia flava and S. variolaris—have long been in use in South Carolina as a domestic remedy for dyspepsia. Dr. Porcher, in a communication to the Charleston *Medical Journal and Review*, calls these species a stomachic stimulant and laxative, and thinks that they also act as a stimulant to the brain and kidneys. For a full description of the Sarracenia purpurea, see a paper by Prof. Bentley in the *Pharmaceutical Journal*, for January, 1863.

Ulceration of the Tonsils.—Dr. G. W. Champ recommends the following wash as most effectual in ulceration of the tonsils, or apthous affecttons of the mouth: Take pulv. sulphate of zinc and chlorate of potash, of each two drachms; strong sage tea, half a pint. Mix. Gargle the throat frequently.

California Medical Gazette.

SAN FRANCISCO, AUGUST, 1868.

☞ *All letters and communications to be addressed to the* "Editor California Medical Gazette," care of A. Roman & Co., San Francisco.

Just as we are going to press we find a very complimentary notice of the California Medical Gazette in the August number of the *Pacific Medical Journal*. We have neither time nor space at this late moment to thank its editors, but we assure them they shall have our most distinguished consideration in our next issue.

PROFESSIONAL HARMONY.

Ut ameris, amabilis esto.—Ovid.

Why is it, that, as a body of professional men, we are not actuated in our general intercourse with each other by an *esprit du corps?*

Why is it, that the physicians of San Francisco do not *extend* to their professional brethren a kindly class feeling?

The fact is so notorious that they do not, that it has become a by-word and a reproach; and the vulgar adage, from the mouths of small shopkeepers and petty dealers, that "Two of a trade cannot agree," may be truthfully used towards them?

What is it, in the practice of medicine in this city, that thus sets one man against his brother? We do not find the feeling existing in other professions. Men in the army and navy, in the law and the church, hold together, and resent an injury to their cloth as a personal affront; but we blush to confess that, in San Francisco, a medical man does not shame to whisper away a brother's reputation in one case, to damn it with faint praise in another, and to crush it with downright misrepresentation in the third.

We are all of us painfully aware, that a similar condition of professional feeling exists in small communities—amongst small men. Where everything is contracted—thoughts, practice, and purse—these petty ideas, petty jealousies, govern every action; these little communities have their little cliques, and a Dr. A. will not meet in consultation a Dr. B., because he belongs to another set. Dr. A., a good honest soul, is influenced by an onward professional feeling, and tries to start, say, a local medical society, for his own and for others' improvement. Dr. B. frowns down the movement, says it is got up for party purposes and private gain, and exercises his small wit in ridicule.

Are we far removed from this state of things in this, our metropolitan city?

Every professional man knows the answer;—and ought we not to be ashamed of it?

San Francisco is not a city of small thoughts, or actions. Why should we only be a *small* body? Men are moved here by generous impulses, wholesoul feelings, and far-seeing enterprizes—and it is meet that they should be—living, as they do, by the cradle of a giant. Why should we only be chained to the centre of an inner circle, and revolve round a selfish, bigoted unit? While everything is growing and expanding around us, we remain as we were in the day of small beginnings.

As a body, the profession in San Francisco is equal in personal respectability and professional ability to an equal number in any city in the world. It, therefore, can afford, and it is a disgrace to it not to, live in professional harmony.

We would ask each one why he is better than another?

Perhaps, he may think, because he has been a longer resident, is an older man, has a larger share of public patronage, or because, perhaps, he thinks he has more brains.

Let us assure any such a one, that most of these advantages must one day be another's, that some are merely fortuitous, and that not one of them will justify him in spattering with mud another behind him in the race.

We, therefore, take advantage of our position as public journalists, to implore our medical brethren to try and live together in professional harmony—to be magnanimous enough to forget any petty jealousy or irritation for the sake of the noble profession to which we all belong. For, beside the moral obligation resting upon us to cultivate, as far as we are able, a feeling of friendship towards our professional brethren—taking out of consideration the fact that our labor is one that should draw us closely together, that there is no profession where mutual aid, support, counsel and encouragement are so earnestly demanded as ours; forgetting that the broad aims, universal sympathies, and comprehensive love, which crystalize around the idea of the science of medicine, plainly inculcate the beauty and the necessity of harmony, the deformity and wickedness of jealousy, envy, malice, slander and all uncharitableness among the great army of men who are working for the grandest of all temporal objects, the amelioration of human suffering; forgetting all the noble and exalted reasons for a peaceful, honorable union in the profession—there is a selfish reason, whose importance cannot be measured.

The practice of medicine means *labor*—labor long and wearisome by day, painful, restless vigils by night; labor that ceases not with the rising or the setting sun; labor on which is engrafted the terrible respon-

sibility of human life and the happiness of families and communities; labor that is soon forgotten and poorly remunerated; labor which only God may know and reward. The practice of medicine means all this, and more. Is this incessant toil to last throughout our lives? Is there not an oasis in the desert of the future, where we may hope to rest from the feverish cares and responsibilities of the past; where we may fall asleep to happy dreams, nor wake stretched on the Procrustean bed of professional punishment? Surely all of us hope at one day to win a release from our burdens, and pass the remainder of our lives in that peace of mind and heart and body which flows from a possession of a competency and the consciousness of a well spent, honorable life. How is this great consummation to be achieved—where can we find the shortest path to the acquisition of this great blessing? The answer is short and ready. We all know it, if we have given the subject one moment's consideration.

We do not believe that the respectable physicians of San Francisco fail in their duty to their patients; they do not neglect them; they give them in their hour of need as good treatment, medical and surgical, as they can obtain anywhere in the world; they sympathize with them in suffering, and keep their secrets. Did their whole duty end here, they were indeed, a model class; but it is in their signal, unblushing disregard of their duty to their medical brethren, that they manifest a most lamentable littleness, that they bring their profession into disrepute, shake public confidence in their art and in themselves, open avenues in which quacks and imposters may lead them in the race to fortune, and keep themselves toiling through years which, had they done their duty, would have been passed in peace and comfort.

Let us not deceive ourselves with empty platitudes about the nobility of the work we are called upon to perform, making of it a labor in which no vein of selfishness can be discovered, no dim hope of pecuniary recompense. We may assume to ourselves an existence in a sphere above the reach and influence of such considerations; we may prate about the grandeur of self-abnegation—of martyrdom of self for the weal of the human family; we may theoretically divorce medicine from the dollar; but rest assured such celestial idiosyncrasies do not last very long. Under the lash of experience and common sense such vapid notions vanish, and in their place appears some wholesome truth like this: while medicine contemplates the well-being of the human family, while her disciples strive earnestly to relieve pain, cure disease, or when that is impossible, to lessen the bitterness of death, they expect from the world the means to live, if for no other eason that their term of usefulness may be prolonged.

The aim of law is the rendering of equal justice to all men, but justice would have a sorry time of it in this world if its defenders received nothing for their pains save a consciousness of labor done in a noble cause. The Lord's Prayer was made for doctors too, and when we murmur "give us this day our daily bread," we have no idea that ravens will come to administer to our wants as Elias was fed by the Torrent of Carith; we well know what this request means, and surely its purity is above reproach—that our daily bread is so hard to earn, that it remains seriously in doubt whether we ever honestly get it. We have to thank our quarrelsome and censorious brothers.

A bold, united front of the profession, opposed to quackery and fraud, would do much to lessen the success of impostors. In default of a union among the regular medical men, they flourish in our midst, and take the wealth which belongs legitimately to us. Hundreds of thousands of dollars are spent in efforts to regain health in our city every year, which would fall to us, if we only learned to *think* kindly of, *speak* kindly of, and *act* in a friendly, honest way to our medical brothers.

This money question may be considered a low one to make use of; but any weapon is of avail, if we can in any manner bring about a better feeling of PROFESSIONAL HARMONY.

NOTES OF THE MONTH.

We learn on inquiring at the Health Office the number of cases of variola and varioloid reported there for the month of July, there were in all 136 cases, and of these 36 died. The exact number of those affected with varioloid we could not determine, and we are inclined to believe the physicians in attendance upon them often found it difficult to pronounce upon the exact disease, since the severer varioloid so closely verges upon variola, leaving little or no difference between them. It is a safe conjecture that one-third of the whole number reported were varioloid, which leaves 90 cases of pure variola. Of these cases 36 died, or about two in five—a fact which demonstrates at once the frightful malignancy of the present epidemic. Many interesting facts connected with the protective influence of previous vaccination, or the actual disease at early periods of life, have come to light during this visitation, and we will take them up in the next number of the GAZETTE. Certainly, one thing is very sure, that time not only destroys the vaccine impression on the system, but even the change wrought upon the solids and fluids of the body by variola itself. The inference is easily drawn—the necessity of re-vaccination as often as the epidemic shows itself. No one may tell from the character of the first

few cases whether the disease may be of a mild or malignant form.

We wish to call the attention of our medical brethren to the admirable plan of preserving pure vaccine lymph, as first suggested, we believe, by Rath Muller, Director of Vaccination at Berlin. It is the dilution of vaccine in glycerine. The knowledge that an admixture of this sort is preëminently available is especially desirable at the present moment, when re-vaccination is being so extensively employed, and when many through ignorance have been employing a spurious vaccination, by using scabs taken from the arms of adults who have been vaccinated more than once. The plan, too, is valuable, because lymph can be kept pure and fresh in glycerine for a very long time. Muller found that it had lost none of its efficiency in two years. The solution may be prepared in this way: if you can obtain fresh lymph from a pock on the eighth day, take one drop, and for every drop you may add fifteen of glycerine—this is by far the most desirable plan; but if you choose a fresh scab, powder it, and then rub up with it a drachm of glycerine. We cannot too strongly impress the necessity of selecting proper lymph, or a good fresh scab and pure glycerine, in order to prevent disappointment in the result of vaccinating, and to insure its protective influence.

By adopting this simple procedure, you will always have on hand an abundant supply of reliable virus, and an outbreak of variola may have its progress at any time immediately arrested by rapid re-vaccination. Some may, perhaps, imagine that this dilution of vaccine lymph may render its peculiar power nugatory. Setting aside Muller's assertions to the contrary, the following statement will show how small, how infinitesimal a portion is necessary to produce the pock of vaccinia:

Three or four years ago, a gentleman living far away from any doctor, on a sheep ranch, in the southern part of the State, wrote to us to send him a vaccine scab, that he might vaccinate his children. We sent the scab, and he used his penknife to perform the operation. Having finished, he says he wiped his knife and put it in his pocket. In the evening he cut his toe nails and accidentally scratched one of his toes, and at the end of the week he had as fine a pock on that toe as the two children had on their arms.

You need not, therefore, be afraid of diluting your lymph; get *it* pure, and your glycerine pure also.

REVIEWS.

The Principles and Practice of Laryngoscopy and Rhinoscopy in Diseases of the Throat and Nasal Passages. By Antoine Ruppaner, M.D., M.A., etc., etc.

Laryngoscopy and Rhinoscopy have been duly initiated into the field of surgery, after the manner of surgical discoveries and improvements—that is, have been kept out as long as possible. It becomes now no longer the pleasure, but the duty, of every surgeon to understand the principles and the practice of the laryngoscope. In order that he may do so, it is necessary that such information be put into available form. The work, whose titles are here set out, embodies the latest knowledge on the subject. We regret that there should be any feeling of rivalry or jealousy between the discoverers of the laryngoscope, but feel sure that the history of its discovery in the first chapter is as impartial and satisfactory as it is complete.

Of the different laryngoscopes descriped by the author, we would be inclined to agree with him in giving the preference to Tobald's. But we are sorry the writer has not more fully described the laryngoscope, as modified and used by M. Fauvel, to which he refers as "a simple and compact apparatus, besides being easily managed." There is no higher recommendation for a surgical instrument or apparatus, than that of being simple, compact, and easily managed. And, from our own experience of the apparatus in question, of which we learned the use with M. Fauvel in Paris, we know it to have these qualifications.

The recipro-laryngoscope described in chapter iv, as constructed by Dr. Smily, will certainly obviate what every demonstrator and student felt to be a very great difficulty. Besides its difficulty, it is very tiresome to the patient to have his larynx demonstrated to a class. Any surgeon who has had much experience in the treatment of ozæna and diseases of the nasal passages, will rejoice at the advancement of rhinoscopy. And from the cases reported by the author, he can at once see that rhinoscopy will greatly assist him in these most troublesome of all surgical cases.

The description of the instruments and their uses is complete and comprehensive, except one, which he describes as "a palate hook, for raising the uvula and pulling it forward, about four inches long." We presume he means a palate-hook, about four inches long, for raising the uvula and pulling it forward.

We might make extracts from the work to show its thorough practical nature; but to those who are desirous of keeping up with the times, extracts would be unnecessary, as they will not fail to procure a work which, in only 150 pages, gives the history, principles and practice of the laryngoscope in diseases of the throat and nasal passages. To those who are not interested in professional advancement extracts are quite useless. We give the little work a hearty welcome to our coast, and hope that it will find a place on the shelf of every surgeon.

Odontalgia, commonly called Toothache; its Cause, Prevention, and Cure. By S. Parsons Shaw. Philadelphia, J. B. Lippincott & Co.; London, Trübner & Co.; Manchester, Palmer & Howe. 1868.

This is the title of a small work on tooth-ache, its causes, prevention and cure. Our little experience in this department of science prevents us from judging of this treatise in its entirety. Of all its merits we cannot speak. By way of a preface, it has a very beautiful plate, illustrating the distribution and connections of the trifacial nerve, which is implicated in nearly all the neuralgic troubles of the face. City practitioners have scarcely any opportunities of prescribing for tooth-ache, but it would be well even for them to bear in mind the suggestions the author offers for the relief and cure of this very painful malady. This little volume would form quite a valuable addition to the library of country practitioners, of whom so many are dentists by necessity.

The cure of tooth-ache by the use of *small* quantities of ar-

senic inserted in the cavity—one fiftieth of a grain—and the necessity of renewing even this in three or four hours, are treated of at some length. The chapter on the origin of tartar is very interesting, and gives many useful hints in reference to this formation, which all may remember with advantage.

The book is printed on excellent paper, and the type is large and clear. We could wish that more of our scientific works came to us in such a creditable style.

Pathological Anatomy of the Female Sexual Organs. By Julius M. Klob, M.D., Professor at the Uhlversity of Vienna. Translated from the German by Joseph Kammerer, M.D., and Benjamin Dawson, M.D. New York, 1868.

This work is only the first volume; it is therefore scarcely fair to criticize an incomplete work. It possesses, however, considerable merit, and is evidently the result of deep thought, and from the pen of a gentleman of extensive knowledge. The reader who takes it up, expecting a treatise that he can peruse and digest in a few hours, will be doomed to disappointment. It is a deep work, demanding concentrated thought; yet it is not by any means an exhausting treatise. The first volume describes only affections of the uterus, and does not enter into those of the vulva, vagina, ovaries, or fallopian tubes; and there are many desiderata that we search after in vain, while of others the description is very imperfect. For instance, inflammation and some of the degenerations of fibrous tumors are not given, and diseases of the decidua are nearly ignored. There is also to our mind one extremely bad feature—the multiplication of technical terms. Surely the nomenclature of our profession is already large enough; and in the race for professional eminence there are few that can spare time to study such an array of technicalities. We readily recommend the work to the deep thinkers, rather than the practical physician.

CURRENT LITERATURE OF THE MONTH.

PRACTICE OF MEDICINE.

REPORT ON THE CASES OF PNEUMONIA TREATED IN THE BOSTON CITY HOSPITAL FROM ITS OPENING, JUNE 1, 1864, UNTIL FEB. 8, 1868.

Read before the Boston Society for Medical Improvement, March 23d, 1868, by J. N. Borland, M. D.

The accompanying table presents the history of 90 cases of pneumonia which have been treated during their respective terms of service by the Visiting Physicians of the Boston City Hospital, from the opening of that Institution on June 1st, 1864, until February 8th, 1868.

These cases I have taken in their regular sequence, according to their dates, from the Medical Record Books, and I have rejected from the series all cases which were in any ways doubtful as to their true diagnosis; and also all of those cases, of which there have been several, where the patients were brought to the Hospital either by their friends, or by the police, in a moribund condition. I have included cases that were complicated with other diseases, but only such as were treated for pneumonia primarily and chiefly.

An examination of this table shows us the following points of interest:

Sex.—Of these 90 cases, 57 were males, 33 females.

Nationality.—But 30 were born in North America, four of these being Canadians. Of the remainder, 52 were Irish, 3 Germans, 2 English, 1 Swede, 1 Frenchman, 1 Italian. This point of nationality is interesting in its relations to the open questions of acclimatization of emigrants.

Occupation.—In persons employed as servants, or leading in other ways sheltered or sedentary lives, there were 39 cases. Of those whose occupations necessarily exposed them at times to rather high degrees of heat, and in some instances to moisture, there were 7 cases. The remaining 44 occurred in those classes whose modes of life caused them to be more or less exposed to open weather.

Age.—The average age of the males was 31 years, 8 months; of the females, 30 years, 4 months; that of both sexes was 31 years, 2 months. From the age of 1 to 10 years, there was 1 case—a female; from 10 to 20 years, there were 8 cases—4 being females; from 20 to 30 years, there were 43 cases—15 being females; from 30 to 40 years, there were 17 cases—6 being females; from 40 to 50 years, there were 9 cases—3 being females; from 50 to 60 years, there were 10 cases—3 being females; from 60 to 70 years, 1 case—a male; from 70 to 80 years, 1 case—a female.

Admissions.—If I include with the cases in the table about 10 which I rejected for reasons previously stated, we shall have a total of 100 cases of pneumonia, admitted up to the 8th of February last, at which date there had been a total of 2,076 medical patients, being about 5 per cent. of the whole; this may be taken as an approximation to the amount of pneumonia in the sick seeking hospital relief. These 90 cases were admitted, according to seasons, as follows: In the winter months, 31—viz., in December 14, in January 9, in February 8; in the spring months, 17—in March 10, in April 4, in May 3; in the summer months, 12—in June 1, in July 3, in August 8; in the autumn months, 30—in September 6, in October 10, in November 14.

Duration.—In these cases I have computed, as accurately as could be ascertained, the duration of the disease from its commencement; that is, from the rigor until its entire disappearance, covering the term of convalescence as well as the mere period of activity. This gives an average of 39½ days. The average duration of stay in the hospital was 28 days.

Results.—These cases resulted as follows:—49 males and 27 females were discharged well; 1 male, 1 female relieved; 7 males and 5 females—or 12 in all, being 7½ per cent.—died. In J. H. Bennett's clinical lectures, he gives a tabulated series of all the cases of acute pneumonia which for sixteen years he had personally treated in the clinical wards of the Royal Infirmary.

Case 10 was one of double pneumonia, and was progressing in a perfectly satisfactory manner, when she was attacked with cerebro-spinal meningitis, which resulted fatally in twenty-eight hours.

Case 26 was one of single disease, located in the upper half of the left lung, and was complicated with phthisis and fatty degeneration of the kidneys.

Case 33 was one of extensive double pneumonia, sick twenty-one days before entrance, and complicated with pleurisy and perhaps with phthisis.

Case 41 was one of mild single pneumonia, complicated possibly with phthisis, dying unexpectedly and suddenly, with symptoms strongly suggesting embolism.

Case 44 was admitted for chronic rheumatism and great debility after privation, having been made prisoner by Semmes in the late war. The disease supervened on these complications.

Case 50 was an uncomplicated case of extensive double pneumonia; entered on the eighteenth day of the disease, and died on the twenty-third.

Case 52, after two days residence in the hospital, died on the 9th day of the disease; was complicated with typhoid fever.

Case 67, double; complicated with surgical injury and pleurisy.

Case 68, double; uncomplicated and very extensive.

Case 73, double; admitted on twenty-first day of illness and died on twenty-sixth; no complication; numerous small gangrenous abscesses were found in the right lung at the autopsy.

This review shows that only 3 cases, Nos. 50, 68 and 73 were uncomplicated, a mortality of 5 per cent. of the uncomplicated total; and that 2, Nos. 10 and 41, should be taken out of this list, being, with reference to pneumonia, accidental deaths—making the true mortality for the whole series, 10.

Complications.—60 cases were uncomplicated; 30 complicated, and as follows: Phthisis in 6 cases; phthisis and bronchitis, 1 case; phthisis and pleurisy, 1 case; phthisis and fatty degeneration of the kidney, 1 case; fatty degeneration of the kidney and sub-acute rheumatism, 1 case; rheumatism, acute, 1 case; rheumatism, acute, and measles, 1 case; chronic rheumatism and debility, 1 case; debility, 2 cases; pleurisy, 3 cases; pleurisy and surgical injury, 1 case; surgical injuries alone, 3 cases; surgical injury and erysipelas, 1 case; intermittent fever, 2 cases; typhoid fever, 3 cases; acute bronchitis, 1 case; cerebro-spinal meningitis, 1 case. One case also was followed by pelvic cellulitis, and one by an attack of facial erysipelas. One case showed gangrenous abscesses at the autopsy.

Treatment.—The greater proportion of these cases have been treated according to the plan set forth by Dr. Bennett, by restoratives directed to further the natural progress of the disease, and supporting the vital strength, not endeavoring to cut the disease short, or to weaken the pulse or the vital powers. The general outline of this mode of nutrition and stimulation in the hospital has been as follows:—Milk always by the bedside for the patient to drink at will. Beef-tea and wine whey, given alternately, regulating the frequency by the severity of the case. In the most severe cases they are given, every two hours, three or four ounces, and, in some cases, for a while, two ounces every hour alternately; so that the patient gets from six to twelve ounces of sherry wine daily, that is, during the waking hours of the twenty-four. If there is great debility, milk punch or brandy punch is substituted for the wine whey. As soon as possible, the alcoholic stimulus is withdrawn, and is replaced by soups, &c. As soon as convalescence takes place, and the patient begins to ask for food, he is placed on a liberal diet of mixed animal and vegetable food. External applications have been made in many cases, by enveloping the entire side affected, or both sides if necessary, in a "jacket poultice" of flax-seed meal, which is carefully attended to and always kept warm and fresh. The active symptoms over, if convalescence seems likely to be protracted from any cause, codliver oil, iron, quinine, &c., have been given as judged necessary. In six cases only were calomel and antimony given, all of which recovered. In no case was bleeding practiced.

Finally, these cases have been treated either wholly or in the commencement, in the following terms of service:—By Dr. J. Homans, 5 cases; Dr. W. W. Morland, 5 cases; Dr. J. P. Reynolds, 5 cases; Dr. J. H. Blake, 7 cases; Dr. J. N. Borland, 21 cases; Dr. J. B. Upham, 23 cases; Dr. F. E. Oliver, 24 cases.—*Boston Medical & Surgical Journal.*

A NEW ANTHELMINTIC.

By Thos. E. Broaddus, M. D., St. Charles, La.

In 1861, Mr. L., a gentleman of robust frame and remarkable muscular development, became subject to frequent attacks of gastro-intestinal irritation, and I was repeatedly called upon to prescribe for him. My usual prescription was mercury, in some form or other, combined with a sedative. This treatment invariably relieved his most urgent symptoms; but he was rarely willing to admit that he felt perfectly well.

On one occasion, when he was more than usually afflicted—complaining of considerable pain in the umbilical region, with frequent ineffectual efforts at evacuation—I requested him to take fifteen grains of blue mass, to be followed, in a few hours, by an ounce of castor oil. Upon visiting him the next day, I saw, from the expression of his countenance, that something unusual had occurred, and that it had not been of an unpleasant character. With the first dejection, after taking the oil, he had passed more worms (lumbricoides) than I have ever known to issue from another patient, and declared himself "a new man."

Being somewhat astonished at this more than usual vermifuge effect of my remedy, (especially as my diagnosis had not included the existence of worms), I inquired if he had taken anything besides what I had recommended. He assured me that he had followed my directions to the letter, and that he had even "swallowed the blue mass in lumps"—he had not been able, with all the flour he could add, to make it into pills. Upon examing his pot of "blue mass," I found that it was *mercurial ointment*, which fully explained the difficulty he had encountered in making pills.

A few months after the case alluded to above, I was called to see a negro woman, about fifty years of age, belonging to Mr. P. M., of this parish. From all appearance, her disease was intermittent fever, without any complication that I could discover. As the treatment of the case had been perfectly orthodox, I was surprised to find that its frequent repetition had not been able to carry her beyond the relapsing period; and as the buccal secretions were viscid, and the tongue presented the same *punctæ* we so often see in wormy children, I thought it would not be amiss to administer a vermifuge. Fifteen grains of the ung. hydrarg., followed by an ounce of castor oil, brought away a large number of worms; and, without any more quinine, her tertian disappeared.

With these two cases as a basis for experimentation, it is not surprising that I should have been tempted to use this remedy when, doubtless, our ordinary anthelmintics would have answered every purpose. Satisfied as I now am, that its antagonism to verminous life is as great *within* the body as upon its surface, I reserve its use for cases which rebel against common modes of treatment. The immediate object, however, of what I have written, is to doubly call attention to the following case:

Mrs. ———, wife of a wealthy planter, had, at different times, discharged several pieces of tape worm, but had not been fortunate enough to expel the head. Having failed to obtain lasting relief, she remained for several months without treatment. In the autumn of 1864, as she was suffering greatly, I advised her to resort to a new remedy. The treatment was as follows: From breakfast until 8 P. M., she took absolutely nothing into the stomach—neither liquid nor solid. At this latter hour she drank a cup of sweetened milk. An hour after the milk, she took twenty grains of ung. hydrarg. made into an emulsion. Early on the following morning she had a draught composed of an ounce of castor oil and a drachm of spts. of turpentine. A few hours after the draught she had a copious and very bilious evacuation; and, with it, discharged some ten or twelve feet of tape-worm—the head being this time expelled. Her health has been invariably good since that event.—*New Orleans Medical & Surgical Journal.*

THERMOMETRICAL OBSERVATIONS IN TYPHOID FEVER.

By Dr. R. E. Thompson.

Dr. Thompson's observations extend over a period of three years, and are made from a careful study of forty-seven cases. They tend to confirm Professor Wunderlich's researches on the same subject. In typhoid fever, a decrease of temperature is not always a favorable sign, nor is a rapid fall symptomatic only of a crisis. As a rule, the nocturnal increase of temperature in this form of fever is very considerable, and amounts to two or two and a-half degrees. During the latter half of the first week, the heat increases day by day, and varies between 102° and 103° in the morning, and 104° or even 105° in the evening. These high temperatures are quite sufficient to distinguish typhoid fever from tubercular meningitis or from peritonitis, these diseases seldom showing much increase over 102° Fahr. During the second week, the temature varies between 102° in the morning, and 103° and 104° in the evening, the oscillations being influenced by the amount of diarrhœa. The thermometer does not enable one to say, by a longer prediction than twenty-four or forty-eight hours, whether the case is likely to be fatal or not; but a steady rise in the temperature will often indicate the danger of ulceration of the bowels twenty-four hours before the intestinal lesion is manifested by diarrhœa and hemorrhage. The mode of termination of the fever is characterized by extraordinary oscillations of the temperature between morning and evening, the difference being sometimes as great as nine degrees. This feature distinguishes the thermograph of typhoid fever from that of almost all other diseases. In one case of perforation of the bowel, which was preceded by hemorrhage, the heat of the body was reduced from 102° to 99.5°, and was followed by a rise to 102.2°, where it remained for forty-eight hours, before death, during which period perforation took place.

ON CROUP AND DIPHTHERIA.

By J. W. Haward, Esq.

Is it correct to speak of croup and diphtheria as two diseases, or are the conditions to which the name of "croup" and "diphtheria" are applied, merely variations of the same disease? Mr. Haward, in answer to this, states that it is his belief that there are two distinct combinations of symptoms, with their associated pathological changes, to one of which may be given the name croup, to the other, diphtheria; that these combinations are constant, and that the elements or terms of the one are never mixed with the elements or terms of the other (though there may be certain added quantities which are common to both); that the constant combinations are of the important and essential elements in each quantity; and that these always occurring in the same and distinct association, there is sufficient ground for regarding each of the two diseases made up of these elements as distinct and non-identical.

NUX VOMICA IN CHRONIC DYSENTERY.

In a recent number of the *Bulletin Gen. de Therapeutique*, is an article by Dr. De Savignac, upon the use of nux vomica in dysentery and dysenteric paralysis. His theory is, that the cause of the disease lies in an affection of the spinal cord, which causes paralysis of the motor nerves of the large intestines, and of the vaso-motor nerves which supply its blood-vessels. If this be correct, nux vomica would appear to meet the indication precisely. Dr. Savignac, who has had large opportunities for observation in the marine hospitals of Toulon, claims excellent results.—*N. Y. Medical Gazette.*

ARSENIC IN THE TREATMENT OF PULMONARY CONSUMPTION.

The clinical investigations of M. Moutard-Martin lead him to place considerable confidence in the employment of arsenic in the treatment of pulmonary consumption. He finds it more suitable to cases slowly progressive than to such as are attended with fever. He has seen notable amelioration of the patient's condition from the use of arsenic, and in some cases actual suspension of the onward progress of the disease. He administers it in very minute doses, never exceeding two centigrammes, and considers perseverance in its use for a long time necessary to a favorable result.—*Gazette Medicale.*

PREVENTION OF EPILEPTIC ATTACKS.

M. Broca has presented to the Academy of Medicine an ingenious little apparatus, which has been invented by M. Rozier, of Bordeaux, with the object of exercising an instantaneous compression of the arm, and of thus preventing attacks of epilepsy whenever these are preceded by the aura epileptica. The apparatus had been contrived for an epileptic patient, a quarryman, who was never six weeks without being subject to a fit, and who was warned each time by a peculiar sensation which he felt in the right index. Scarcely a few seconds elapsed between the occurrence of this sensation and the explosion of the attack. It was consequently needful that the compression should be instantaneous. For eleven months the quarryman has constantly worn this little apparatus, and has never yet had a complete attack. It is a sort of bracelet, and seems admirably adapted for all the purposes aimed at by the inventor.—*Lancet.*

PHYSIOLOGY.

EXPERIMENTS ON CUTANEOUS ABSORPTION.

By M. Ch. Hoffmann.

Fever, or thermal excitement, always manifesting itself only after a number of baths more or less prolonged, and being, as we know, only the effect of a slow and continued absorption, through the skin, of some of the most active principles of mineral waters, I have thought that, placing myself in the situation of a patient subjected for several days to a thermal treatment, I might succeed in throwing new light upon the disputed question of cutaneous absorption.

The substances on which my experiments were tried, are digitalis, iodide of potassium, and chloride of sodium.

For several weeks, but with intervals of two to four days, I took baths medicated with these substances, and after each bath I took care to wash my whole body with ordinary tepid water. This precaution was indispensable, for every one knows that the skin easily absorbs certain highly reduced powders, and carries them into the torrent of the circulation, as if they were diluted in a fatty body. The numerous cases of poisoning related in the old works on toxicology, and the frequent accidents which medicine has every day to record in the manufacture of chemical products by the subjection of workmen to an atmosphere charged with deleterious powders, are no longer a matter of doubt. In short, during the whole time of my experiments, my epidermis presented no excoriation able to afford an absorption, either special or more ready than usual.

(1) During 44 days I took 16 baths, each composed of 300 *litres* of water with 250 *grammes* of the leaves of digitalis. After the third bath only, I began to feel a peculiar *malaise*, characteristic of the action of the remedy; at the same time

my pulse diminished four or five pulsations a minute, and this lasted several hours. At the eighth bath the *malaise* increased, and my pulse, which ordinarily had a rate of sixty-eight beats a minute, showed only sixty-one. At length, after the sixteenth bath, my pulse had descended to forty-eight beats a minute. Then the absorption of the active principles of the digitalis had taken place, but in a slow and progressive manner.

(2) Every three days, for a month and a half, I took a bath, to which I added fifty *grammes* of iodide of potassium. From the fifth bath I easily recognized the presence of the iodide in my urine, and this condition even lasted twelve days after all treatment. Evidently if the absorption had been slow of production, the excretion was made not less slowly.

(3) After repeated doses, during four successive days, my urine by day and by night contained an average of chlorides corresponding to 2.15 gr. of chlorine to the *litre* of liquid. For a month I took, every third day, a bath made with five *kilogrammes* of sea salt. After the third bath the quantity of chlorine was already 2.58 gr.; after the seventh, it rose to 2.98 gr.; and at length, after my sixteenth and last bath, it was at 3.47 gr. After this, can we deny the absorption of the chlorides by the skin, when patients are subjected to baths either of mineral or sea waters?

These experiments, which I pursued with other organic substances, and with mineral salts, led me to the following conclusions: First, chemical and other agents, dissolved in water, very slowly, but sensibly, enter the animal economy by means of the external integument; and it is only when the blood and other fluids are saturated that the organism rejects them. Secondly, all remedial agents are not absorbed by the skin in equal degree. Thirdly, the contradictory results hitherto obtained arise solely from the experiments not having been continued long enough.—*Gaz. Méd.*, April 13, 1867.

THERAPEUTICS—PHARMACEUTICS.

LIQUOR MAGNESIÆ CITRATIS.

By J. H. Harte, New Orleans.

There have been so many formulas published for this preparation, all differing from that of the pharmacopœia, that it would at first appear superfluous to add to the number; but it is important that physicians should be aware what their patients receive when this medicine is ordered. If prepared according to the formula of the pharmacopœia, it would not keep for more than two days unchanged, and consequently cannot be kept on hand by apothecaries; yet for many requirements it is the best, containing but a slight excess of acid.

The following formula has been used in most of the first-class drug stores of this city for several years, and so far appears to answer all the purposes desired, being a pleasant, certain, and stable preparation:

R.	Acid. Citric.	dr. i;
	Mag. Carb.	dr. ss.
	Aq. Bull.	f dr. x;
	Syrup.	f dr. ij;
	Tinct. Lemon.	q. s;
	Pot. B. Carb.	℈ ij.

Dissolve the acid thoroughly in the water; to the solution add the carb. magnesia; and when effervescence ceases, the syrup, flavored with the essence of lemon. Filter, bottle, add the bicarb. potass., and cork. If well stopped, this preparation will keep for months unchanged. In this, however, it is necessary that *all* should be filtered before bottling.

HYDRATED SILICATE OF MAGNESIA.

For this discovery the profession is indebted to M. Petrequin. He proposes its use as a substitute for the bismuth, not only on account of its existing abundantly in a natural state, and of the facility of its preparation artificially, but also on account of its cheapness. This substance is white, insoluble and insipid. M. Petrequin has used this salt with success in chronic diarrhœas, in intestinal fluxes of various kinds, and particularly in the diarrhœas produced in dyspeptics by the use of fruits. Observation teaches us, moreover, that the silicated mineral waters exert a beneficial influence in digestion, which may be owing to the silicate of magnesia they contain. As to the action of the two salts, they are not exactly the same it must be admitted. It is evident that, in certain forms of dyspepsia, where the sub-nitrate of bismuth is beneficial, the silicate of magnesia may fail; but in passive diarrhœas, on account of its absorbent and protective powers, it acts like prepared chalk and is highly useful. Such is the opinion also of M. Brassac, physician of the first rank in the navy.—*Jour. de Méd. et de Chir. Prat.*, Feb. 1867.

ACTION OF CRYSTALLIZED SULPHATE OF SODA ON STAINS OF THE CORNEA.

By M. D. De Luca, of Naples.

Under ordinary means I have found during my long practice the impossibility of getting rid of many stains and opacities of the cornea, produced in various ways, often even the result of remedies applied to the eyes. I have also observed that laudanum and the tinctures, as well as astringent solutions, (such as tannin), produced by their action on the eyes stains which persist under all ordinary treatment. It is known, indeed, that these alcoholic and astringent substances coagulate the albumen of the tissues, which, in this manner, lose their natural transparency, so that I have in my practice forbidden the use of all substances which can in any manner affect the transparency of the tissues of the eye.

After many unsuccessful attempts, I thought that the crystalized sulphate of soda, which has the power of maintaining the fibrine of the blood in solution, might act favorably upon the eyes, and cause the complete or partial disappearance of stains of the cornea.

In my first experiments I used a watery solution of sulphate of soda (saturated when cold), and applied several times a day in drops to the globe of the eye. After several days of treatment the patient improved, and the opacities became smaller, but it was easily seen that the action should be more prolonged to obtain really satisfactory results. At length I thought of using the sulphate of soda in a state of crystalization, and in the form of a fine powder. Placing the patient in a horizontal posture, I put a pinch of this powder on the ball of the eye, leaving it to melt in the liquid which it formed and produced in the eye. Excellent results were obtained; the stains began to disappear after some days of this treatment, and patients who could see nothing before the treatment began, were able not only to distinguish light from darkness, but even to perceive in a manner more or less distinct movements executed before them. Under this treatment the patients experience an agreeable sensation of coolness after the application of the powder, when it begins to dissolve in the tears. It is well known that crystallized sulphate of soda lowers the temperature of water in which it is dissolved.

In a word, sulphate of soda, either in solution, or better, in fine powder, causes total or partial opacities of the cornea to disappear; this has been demonstrated partly by the experi-

ments made on several individuals in the Hospital for Incurables at Naples, under my care, partly in my own practice. The results of future experiments shall be submitted to the Academy, but I trust that other experimenters will make attempts in the same direction, so as to add new facts to those now mentioned.—*Gazette des Hópitaux*, No. 69, 1867.

SURGERY.

POPLITEAL ANEURISM CURED BY DIGITAL COMPRESSION.

The patient, a man aged 40, having first noticed a tumor the size of a nut in the popliteal space 16 months before, entered the Hópital des Cliniques. On entrance, the whole popliteal space was filled by a large tumor, preventing flexion of the leg, in which the characteristic pulsation and bruit de souffle were easily observed. The skin over the tumor was much stretched. Eight days after he complained of a sharp pain in the tumor, which had sensibly increased in size. The pulsation and bruit were also more marked, and there was an evident circulation between the tumor and the skin. The skin was extremely tense, sloughy at several points, and threatening to rupture. Digital compression of the femoral was applied, The pulsation ceased in ten or twelve hours and the tumor became hard and cold; the compression was kept up for sixteen hours. Two days later, the pulsation having re-appeared, the compressor of professor Broca was applied for ten hours without result. The following day digital compression was kept up four hours, the pulsation ceasing at the end of the second hour. The next day the pulsation appeared again, but ceased after digital compression for two hours. In two days it returned for the third time, though only in slight degree, and was again and finally checked by digital compression in one hour. Two sloughs of the skin, abont an inch in diameter came away and left a bare pocket filled with clots. The outer clot, of a red color, was removed by repeated washing. Beneath it a second, fibrinous, yellowish, in thin layers, softened, sloughed, and was removed partly by traction, partly by washing. The clots which closed the opening between the artery and the pocket remained firm, so that there was no hemorrhage. The wound gradually contracted and completely cicatrized, and the patient left for home a little more than two months after the treatment commenced, almost entirely cured. There remained only a paralysis of the popliteal nerve, caused, doubtless, by its compression, and probably by its destruction.—*L'Union Medicale.*

TREATMENT OF WOUNDS BY PNEUMATIC OCCLUSION.

This treatment has excited considerable attention in France for two or three years, and has been applied in some of the hospitals there. But little has been heard of it, however, in American journals. We take from the *Archives Generales* the remarks of MM. Maisonneuve and Guérin on this treatment, at recent meetings of the Academie des Sciences.

M. Maisonneuve says the suction apparatus is composed: 1st, of a sort of rubber cap, furnished with a tube of the same substance; 2nd, of a flask holding three or four quarts, its stopper containing two holes; 3d, of a suction pump, also furnished with a flexible tube. The stump enveloped in its dressing, is in the first place covered by the rubber cap. The opening of the cap is fitted exactly around the limb, while the end of its tube is applied to one of the openings in the flask. The tube of the air pump is applied to the other opening, and part of the air contained in the flask is exhausted. The fluids of the dressing and those which exude from the wound are also sucked out and fall into the flask. The rubber cap, the air which it contained being exhausted, collapses and applies itself closely against the stump. The weight of the atmosphere causes a powerful compression, which keeps the divided surfaces in contact, and combined with the suction produced by the rarefaction of the air of the flask, prevents any collection of fluid and thus favors prompt cicatrization.

M. Guérin divides the application of the treatment into four classes. In the first are comprised the flesh-wounds and simple surgical operations, such as incisions, removal of cicatrices or subcutaneous tumors, extraction of foreign bodies from the joints. In the second class are comprised more severe operations, amputations of limbs, and accidental wounds of like severity. In a third class are contused wounds, with opening of the skin, and simple compound fractures, that is where there is perforation of the skin, the bone being simply broken. In a fourth class are gun-shot wounds, with laceration and destruction of tissues, comminution and splintering of bones, wounds combining the graver complications of traumatic lesions. A wide division may be established between the results obtained by the method of pneumatic occlusions, and they may be placed in two distinct classes. In the more normal conditions, pneumatic occlusion causes cicatrization of the wounds without traumatic fever, without suppurative inflammation, that is, by first intention. In less favorable conditions, as when the wound has already been for some time exposed, or when it contains foreign bodies, or finally, when it is complicated by previous morbid states, pneumatic occlusion cannot prevent a certain amount of suppurative inflammation; but, by virtue of the continued suction which it exerts, it opposes any accident resulting from the putrefaction and absorpation of altered fluids, and in all cases favors and renders more rapid the cicatrization and secondary union of wounds.

REMOVAL OF FOREIGN BODIES FROM THE ŒSOPHAGUS.

By David Rice, M.D.

A number of years ago, I reported for the *Boston Medical and Surgical Journal* a new method of removing foreign bodies from the œsophagus. Since that time I have had a number of cases of the lodgment of foreign bodies in the œsophagus, and have never failed of removing them by the method of which I claim the discovery, viz., by the sponge probang. The sponge probang has been used from time immemorial for this purpose, but it is the *peculiar shape of the sponge*, and the method of using it, that I claim as originating with myself. No longer ago than last week, I removed from the œsophagus of a lady a long piece of bone, which had remained there three days. The bone was about two lines in diameter, and one and a half inches long.

Case.—Mrs. F., a lady 60 years old, swallowed a piece of bone with some meat, which became lodged in the œsophagus. She sent for me the following day. When I arrived, she said she felt better than on the preceding day, could swallow water, and begged to have any trial for the removal of the foreign body deferred. On the fourth day I was called again, and found her suffering great pain, with extreme difficulty swallowing even fluids. I immediately introduced my sponge probang, and without the least difficulty succeeded in removing the piece of bone, together with a piece of beef. In fact, I have often removed pieces of bone, beef, needles, etc., in the manner formerly described in your journal. The instrument I use is a whalebone probang, small and elastic, in size about the diameter of a penholder, or perhaps one eighth of an inch in diameter, curved at the lower end. On the inside of the

concavity I fix at the lower extremity a piece of sponge, in the shape of a cone about an inch in length, very sharp at the bottom, and tapering gradually to the base, which is about one half an inch in diameter when dry. The apex of the cone is fixed firmly to the bottom of the probang, about one half being left floating. The base of the cone being upward, is cut perfectly square on the top. I apply oil of almonds to the sponge before introducing it. Being very soft, it easily passes by a foreign body lodged in the gullet, and on being withdrawn, the round, flat base can hardly fail of finding and bringing up the foreign body in question. Your readers will observe that it is the peculiar shape of the sponge that renders success so certain with my sponge probang. The probang and sponge should be well oiled before an introduction is made into the œsophagus.—*Boston Med. and Surg. Jour.*, March 2d, 1867.

FOREIGN BODIES IN THE AIR PASSAGES.

By M. H. Shaw, M.D.

Inasmuch as the removal of obstructions from the nasal passages of children by the usual mode, as described in our books, is many times attended with perplexing difficulty and chagrin to the surgeon, and intense anxiety to friends, I am induced to offer a few suggestions as to a mode of practice quite different, which I have pursued for over twenty-five years, obviating many objections to the usual plan. It entirely obviates the use of chloroform, as the efforts and struggles of the patient rather facilitate the operation than otherwise.

The instrument consists of six or eight inches of fine wire, bent in the form of a hair-pin; indeed I have several times used a common hair-pin with very good results; yet a finer unannealed wire is better. The double end of the wire should be larger or smaller, to correspond to the size of the nostril of the patient. The patient, (usually a small child) seated in a male assistant's lap, with his extremities secured, the surgeon can, with a good degree of confidence, thrust the bent end of the wire into the nostril above the obstruction, and withdraw it, or partially withdraw it, and in most instances the patient is immediately relieved. If not by the first effort, try again, as the plan is sure to succeed; at least it always has in my hands.

By the usual operation, before the age of chloroform, while in my pupilage, I saw this trifling accident several times by respectable surgeons converted into a protracted and tedious operation, which in all probability might have been done in a few moments with the bent wire. The safety in the use of the instrument without chloroform, and the dispatch attending it, renders it, in the opinion of the writer, the best possible mode for this purpose.

I have several times, before the introduction of chloroform into practice, used the same instrument to remove foreign bodies from the internal ear, with good results. Yet I now usually administer chloroform and use forceps as a better mode.

I am of the opinion, the same principle applied to obstructions of the œsophagus might give satisfactory results. The wire should be larger and longer, and the double at the end should be made to correspond to the size of the orifice. I can see no good reason why this plan might not be resorted to in the absence of other instruments, with a reasonable prospect of success.—*Buffalo Med. and Surg. Jour.*, Feb., 1867.

TREATMENT OF WOUNDS.

The following brief extracts from a leading article in the *Gazette des Hôpitaux*, from the pen of Dr. Victor Revillout, will be read with interest at this time, when so much is being done with the view of facilitating the union of wounds, and avoiding the dangers of suppuration. He contrasts the principles and methods of Guerin, Maisonneuve, and Lister. "Guerin wishes to prevent, as far as possible, the contact of air, and thus to place open wounds in similar conditions to subcutaneous ones. Oxygen is, in his eyes, the principal cause of suppurative inflammation; and by excluding it, he hopes more easily to obtain immediate union."—[He endeavors to obtain this end by fixing over a stump a nightcap of india-rubber, which communicates by a tube with an air-pump; the air being thus exhausted from the bag, it is retained in position by the weight of the atmosphere, excludes air from the wound, and maintains an equable compression.]

"Maisonneuve, on the other hand, is not afraid of oxygen, but *he* is afraid of dead fluids. His conclusions are: 1. That the so numerous and varied febrile accidents which complicate most wounds, and constitute the principal danger of surgical operations, are always the result of *a poisoning*. 2. That liquids exuding from the surface of wounds die when in contact with the air; that they then putrefy and become dangerous poisons. 3. That, could we prevent the liquids from putrefying on the surface of the wounds, then the greatest surgical operations, even amputations of limbs, could be performed without danger."

In M. Guerin's apparatus, Maisonneuve believes that he has discovered a simple and practical means of fulfilling his indication. By exhausting the air, it removes the fluids effused on the wound. The surfaces having been bathed in alcohol, are brought together with strips of plaster, which do not prevent the escape of serum, etc.; then the whole is covered with a bandage soaked in some aromatic and anti-putrid fluid, such as tincture of arnica, and then the caoutchouc bag is put on.

Lister, like M. Maisonneuve, claims the honor of having been the first to discover a principle. He does not pretend to have been the first to use phenic acid (carbolic acid), but to have been the first to use it with method and with a clear design. Mr. Lister does not trouble himself about the "oxydation of wounds," like M. Guerin, nor about the death of confined fluids, like M. Maisonneuve. His fundamental theory is that of germs—that is to say, he, following the opinion of M. Pasteur, attributes to miscroscopic organic germs floating in the air all the fermentations and decompositions of contained fluids. To destroy these he uses carbolic acid; he endeavors to render all his wounds "sub-carbolic wounds." This is another kind of occlusion, directed not against oxygen, but against the organic dust of the atmosphere.—*Gazette des Hôpitaux*, No. 141, Dec., 1867.

DIFFICULTIES IN THE EXTRACTION OF CATARACT.

By M. Fano.

The relation of the crystaline lens in the operation for the extraction of cataract, places the surgeon in a most painful and embarrassing situation. This condition may be due either to a want of elasticity in the coats of the eye and in the capsule of the lens, in which case the eye is soft, the corneal flap exceedingly flexible, and the compression of the eye is necessary to prevent the lens from forcing out the vitreous humor, and driving the lens deeper in the eye; or it may depend on the incomplete division of the capsule, which is liable to be the case in capsulo-lenticular cataract. Let us add, at the same time, that this accident may occur because of adhesions between the pupillary border of the iris and the capsule, or by reason of union between the lens and the vitreous body by the interposition of plastic matter.

There are two ways of remedying this evil: by incision of

the iris, in order to enlarge the pupil; or by means of the curette. In the first instance there is no danger of injuring the vitreous body, but we increase the wound of the eye, and the operation is accompanied by a slight hemorrhage. In the second instance great skill is necessary in manipulating with the curette, to avoid wounding the vitreous body. Each operation has its advantages, however, and both have been performed successfully. In the choice of the operation some judgment must be exercised, as to the predisposition to inflammation in the eye to be operated on.—*Jour. de Méd, et de Chir. Prat.*, Dec., 1866.

ENLARGEMENT OF THE SPLEEN TREATED BY QUININE INUNCTIONS.

It is known that there are cases of swamp fever, in which the spleen maintains its increased size in spite of long internal administration of quinine. It is in such cases that hydropathy works wonders, especially when the patient is removed from the pernicious influence of the locality in which the disease was contracted.

In inveterate cases of intermittent fever the estimable practitioner of Nimes has thought it well also to resort to counter-irritation over the spleen, together with quinine employed according to the endermic method. In a work upon this subject, addressed to the Medical Society of Marseilles, M. Mazel embraces under the name of counter-irritants blistering and the actual cautery.

"A blister," says he, "will often suffice, provided it be very large, very severe, and dressed once or more, according to the indication, with sulphate of quinine. Cautery will be reserved more particularly for those cases in which the above treatment, from whatever reason, would be inapplicable; for those cases in which its effects shall have proved slight, or of no force whatever, which will often happen in old cachepies, when the spleen, inordinately hypertrophied, presents a hardness almost scirrhous. The artery which creates an intense and lasting inflammation then causes a most salutary revolution."—*Jour. de Méd. et de Chir. Prat.*

INFECTING AND NON-INFECTING CHANCRES.

By Edgcombe Venning, Esq.

Mr. Venning has had a large experience of syphilis amongst the soldiers of the Life Guards, and seeks, in this paper, to point out some aids to diagnosis, in distinguishing between the two forms of primary sores, viz., that which is followed by constitutional symptoms, and that which is only a local disease. In the simple non-infecting chancre, he merely gives the iodide of iron, and uses some local application. In answer to the query, "Is there any symptom by which we can, in all cases, recognize the presence of an infecting chancre?" Mr. Venning says, that while induration may exist without the sore being infecting, the result of his own observation seems to prove that the infecting form is always attended with the amygdaloid enlargement of the glands in the groin. He does not remember of ever having seen a case in which this symptom did not exist.

INFLUENCE OF CLIMATE ON VENEREAL DISEASES.

The evolution of syphilis, according to M. Lagneau, would be less rapid in cold than in warm countries, at Christiana than in France, in France than in the tropical regions. Gonorrhœa, very common in the United States, less so in China, would scarcely manifest itself amongst the natives of Algeria and the Levant, except those in contact with Europeans. Syphilitic maladies should be cured less readily in cold than in warm countries, and easily with the negroes.

When two races come in contact in the same country, syphilis falls most severely on that which previously had been least subject to it.

Individuals who contract syphilis in any country would find its effects to amend in a warmer climate, and to be aggravated in a colder one.

Syphilis, though universally diffused, would seem unable to establish itself permanently in Iceland, situated almost under the polar circle. According to Livingstone, it would be spontaneously cured in the interior of Southern Africa.

Syphilis has a direct relation with inefficiency of prophylactic measures. In England, where these measures are nearly null, the annual proportion of the infected is 318 to 1,000 of the effective military force; in France it is 113, and in Belgium only 90, where these measures are very strict.—*Jour. de Med. et de Chir. Prat.*, Feb., 1867.

ANIMAL GRAFTS.

A brilliant French novelist not long since wrote a curious tale, recently translated for the American public, with the original title, "The Man with the Broken Ear." The plot was based on the scientific truth that viability in the part and system can be retained when function ceases—that what we call *life* is but function in action.

Plastic surgery recognizes this life in a part, and grafts one portion of the body on another, or replaces a portion of a nose or a finger when lopped off, and witnesses its growth. In the lower animals this principle is astonishingly developed. Cut a polyp into a dozen pieces, and each fragment will develop itself into an independent and perfect type of the species. A French naturalist, M. Vulpian, cut off the tails of tadpoles, and saw them not only live but *grow* for ten days, indifferent to all theories of nervous centres, digestive apparatus, or circulatory systems. But the member that seems to have the strongest dose of the "vital principle" is the tail of a rat. This is the very ideal of life, and here, if anywhere, we ought to locate the seat of vitality. The following experiment was made by Mr. Bert. He dried a rat's tail under the bell of an air-pump, and in immediate proximity to concentrated sulphuric acid, so as gradually to deprive it of all moisture. Then he placed it in a hermetically sealed glass tube for five days. At the end of this time he subjected it for a number of hours to a temperature of 98 degrees, centigrade, in a stove, and subsequently sealed it a second time in his tube. Four days more having elapsed, he united this tail by its cut extremity to the freshly-cut stump of a living healthy rat, and quietly awaited the result. His success was as complete as it was marvelous. It commenced to expand and perform the natural duties of a tail; and, three months afterward, he demonstrated by a second amputation, and careful injection, that it was furnished with proper vessels, and was a living part of the second rat.

What rich lessons practical surgery may learn from such experiments, can be imagined. A careful anatomist has transplanted a fragment of bone from the skull of one rabbit to the skull of another, and found it form adhesions and replace the lost portion perfectly. A piece of periosteum taken from a rabbit twenty-four hours after death, grew and produced bone when grafted neatly on a living animal of the same species. Nerves have also been removed from one body to another with success, and some very singular results noticed where a portion of a motor was excised and supplied by a fragment of a sensory filament. The diseases to which grafted members are subject, after they have been exposed to certain reagents, are also full of hints for the pathologist and the physician. But we must refer our readers, curious in such matters, to the papers of the writers mentioned.—*Phila. Med. and Surg. Rep.*, Aug. 24, 1867.

OBSTETRICS—DISEASES OF WOMEN.

REMARKS ON RETAINED PLACENTA.

By Charles Bell, M.D., F.R.C.P.E. (Read before the Obstetrical Society, 13th November, 1867.)

Having experienced the difficulty and anxiety, as well as the deep responsibility, incurred in the management of retained placenta, I have been induced to bring the following cases before the Society, not only from their interesting character, but in order to draw forth the opinion of the members who have had more extensive opportunities than I have had of judging of the importance of the subject, and with the view of benefiting by their observations.

There are four principal causes assigned as producing retention of the placenta, each of which demands our special care and attention. The most common is inertia, consequent on tedious labor, or natural feebleness of constitution. This may affect the uterus generally, or it may be partial, in which case it is liable to be complicated with the second cause of retention, which has been called spasmodic or irregular contraction of the os uteri—a condition resulting from a too hurried termination of the second stage of labor, when the previous one has been slow, or from the injudicious delivery of the child when the uterus is not acting. It is very questionable, however, if this apparently premature contraction of the os uteri can properly be considered as a spasm or an irregular contraction, as there are strong reasons for believing that it is a natural process; and on careful examination, the parts feel in a normal state, although it has been assumed without the consent or sympathy of the fundus. This will appear the less remarkable when we recollect that in the cervix and os, although "composed in part of tissues similar to those of the body" of the uterus, the arrangement is completely different; and that during the second stage of labor the os is in a comparatively passive state, and when no longer distended by the presence of the child, it is liable to contract irrespectively of the state of the fundus. This independent action of the cervix and os is obviously a wise provision for the purpose of preventing a more serious occurrence, namely the inversion of the uterus. When we pass one hand into the uterus in such circumstances, therefore, we do not overcome a morbid spasm, as is generally supposed, but simply re-dilate the naturally contracted os and cervix.

This opinion is justified by the fact that in removing the placenta when in the vagina, the membranes often seem to be grasped, and in some instances so firmly, that if they are not sufficiently twisted and gently extracted they are liable to be left in the uterus. Also in passing the hand into the uterus in the case of hemorrhage, we often meet with a difficulty from the diminished size of the os, while the vagina is in a relaxed and fully developed state, showing that it is longer in being contracted after labor; hence, it is reasonable to suppose that it forms the lower chamber in the following cause of retention.

The third cause of retention of the placenta is what is called in books "The hour-glass contraction," which is erroneously supposed to be situated in the body of the uterus, and to divide it into two equal "chambers or cavities." It is said to be of very rare occurrence. This I readily believe, as it is very questionable if any such contraction ever exists, it is so contrary to the anatomy and physiological action of the part. I am therefore disposed to entertain the views on this subject so admirably expressed by Sir John Chapman of Windsor. Yet, since his time, this form of irregular contraction has been frequently illustrated in books, along with many others equally fanciful. Denman even goes so far as to say that in "those cases in which the placenta is retained, irregular action of the uterus is in some cases evident for several weeks before the time of labor;" and the "forms which the uterus may assume in consequence of this irregular action are innumerable."

The fourth cause of retention of the placenta is its adhesion to the walls of the uterus, which is in some instances so intimate that it is impossible to separate them without "direct injury to the uterus," or to determine the boundary line between them on dissection. This alarming state may be combined with contraction of the os, which renders the case more complicated and dangerous. Ramsbotham asserts that this adhesion is more common in the lower classes, as they are exposed to those accidents during pregnancy which terminate in inflammation and agglutination of the placenta and uterus; and this morbid adhesion may be suspected, if "the uterus continues to act moderately, and if, on putting the funis rather on the stretch, and then letting it suddenly go, it springs up with a sort of jerk;" but the only certain proof of the existence of this accident is to be obtained by introducing the hand into the uterus. Some women seem to have a constitutional tendency to such morbid adhesions, without any apparent cause or symptom during pregnancy, of which the subject of the first of the following cases is a clear example.

From these facts, the importance of the judicious management of the third stage of labor must be obvious to every one who turns his attention to the subject; yet it has given rise to great diversity of treatment, and in regard to it the most dangerous precepts have been laid down by those in high authority.

In former times there were two distinct and opposite rules inculcated: the one existed from the time of Hippocrates, and recommended that the placenta should be left until expelled by the natural efforts of the womb; the other, for which we are indebted to Celsus, suggested that the hand should be introduced into the uterus immediately after the birth of the child, for the purpose of removing the placenta. Each of these practices had their advocates, until the time of Smellie, who states that he "swam with the stream of general practice," which was in favor of the suggestion of Celsus, "until, finding by repeated observation that violence ought not to be done to nature" by hastily extracting the placenta, he resolved to adopt a new method, which is very much what is pursued in the present day in ordinary cases, with the exception that in some cases he was in the habit of inducing vomiting. His contemporary, Dr. Hunter, however, advocated the practice of Hippocrates, until some fatal cases induced him to change his treatment. Denman was rather inconsistent in his practice, for while he was in the habit of keeping his patients "in the erect position till the waters broke spontaneously, and the child was on the point of being born," with the view of hastening and facilitating the expulsion of the placenta, he informs us that it may be retained for many hours, or even days, without doing any mischief, "unless there be an existing hemorrhage;" and in conformity with this opinion he laid down the rule which has been adopted by many others, "that if the placenta was not expelled at the end of four hours from the birth of the child, it is generally wise to determine upon extracting it; and the accoucher should not leave the room until it is expelled." He had a singular dread of attempting to introduce the hand into the uterus until the os was amply dilated, lest it might "clip round the wrist." After the hand was once introduced, he advised that it should not be withdrawn until the placenta was separated, when it was to be grasped, and then slowly extracted until it reached the vagina, where it was to be "suffered to remain for several hours, to avoid the hazard of subsequent hemorrhage." This is a most

objectionable practice, and could only tend to give uneasiness and alarm to the patient; for, after putting her to the pain of introducing the hand into the uterus and partly withdrawing the placenta, she would not readily be persuaded that everything was right until the afterbirth was delivered; while its being left in the vagina could be of no possible benefit.

Burns laid down the rule that the accoucheur should "never leave the room until the placenta is expelled; and if it is not expelled within an hour, it ought to be extracted."

Collins, although he does not go so far as Denman, considers that "having waited for about two hours, and employed all the gentle means ordinarily recommended for promoting the expulsion of the placenta, without effect, we ought to give assistance."

Notwithstanding the regulations laid down by those eminent men, as well as by many others who might have been referred to, it is a much better and safer practice to relieve the patient from all anxiety, and make her comfortable with as little delay as possible. This cannot be accomplished so long as the placenta is undelivered; therefore, after allowing from a quarter of an hour to twenty minutes for the uterus to recruit its energies after the birth of the child, if it then shows no indication of acting, means ought to be adopted for removing the placenta. Slight tension should be made on the cord, and if the placenta does not advance, then the finger of the other hand should be passed into the vagina along the cord, and if it can reach its insertion, the placenta should be removed immediately; but if it is still within the uterus, we must ascertain the cause of its detention, and, if there is merely inertia of the uterus, endeavor to overcome it by means of stimulants, the ergot, and by gentle friction and pressure on the abdomen. Should these means not induce expulsion in a short time, then the hand should be introduced into the uterus, and the placenta extracted at once. If the os is strongly contracted, the fingers are gently to be inserted into it, and its contraction overcome, which is easily done if there has been much hemorrhage; but if this has not been the case, and the os resists the introduction of the fingers, recourse must be had to opium. Bedford, however, strongly recommends the employment of belladonna in such circumstances, which, he says, has a very remarkable effect in dilating the os uteri. But it is very questionable if this hazardous application should be preferred to the employment of opium or chloroform.

When the placenta is adherent, the practice of grasping it and endeavoring to separate it from the uterus by drawing the fingers towards the palm of the hand, is preferable to inserting them between the two organs, and forcing them separate as by a wedge, as has been recommended by some accoucheurs.—*Edinburgh Journal.*

MISCELLANEOUS.

MISCROSCOPIC DETERMINATION OF SEMINAL STAINS.

The resolution of the question whether suspected spots upon clothing have been produced by seminal fluid or not, can, as is well known, only be referred to microscopic examination, and this can only give satisfactory results when we are fortunate enough to detect complete spermatozoa with head and tail in natural connection. Generally however, such a result cannot be obtained with old spots, where they have been treated according to the method of Koblank; namely, softening with distilled water, and microscopic examination of the expressed fluid.

Not unusually we can see a great number of roundish and elliptic little bodies having altogether the appearance of the heads of spermatozoa, and amongst them distinct fine threads which may easily be taken for the tails, but to find both in connection costs much time and trouble.

Pincus has ascertained that this is not simply to be ascribed to mechanical destruction of the spermatozoa on drying, whereby on moistening again the tails are more easily lost or chemically broken up, but that in many cases the spermatozoa apparently deprived of tails really possess them, and that the latter may easily be rendered visible.

In legal investigation Pincus found a great number of heads, but only after an hour's search succeeded in observing indications in two cases of the thread-like continuations. But, after several days, the slip of glass, upon which the thin glass cover had firmly dried, was again examined, and now a number of the most distinct spermatozoa were to be seen, with heads and tails naturally connected.

On a repetition of the experiment, the same result was obtained. At first the bodies were seen without the thread-like ends, but two days later the least experienced eye could detect the complete spermatozoa, and could follow out sharply and distinctly marked tails to their finest termination—*Viertel-jahrschrift für gerichtliche u. öffertliche Medicin.—Neue Folge, Bd.* 5, *s*, 347.

IMPROVED MODE OF EMBALMING.

A probably exaggerated account of M. Marini's discovery has been published by a French paper, *Les Mondes.* It would appear that M. Marini succeeds in preserving parts of or the whole body, with all the solids and fluids of the living organism, such as muscle, blood, brain, etc,, either in a mummified or petrified state. He can, besides, when the desiccation has not been carried too far, bring the mummified portions back again to their original volume and look, so that an arm, for instance, may be transformed after many months into the same state as that observed a few hours after death. Indeed, the paper above alluded to gravely says that, in Corsica, M. Marini preserved the body of a deceased far-famed historian to such a degree that four months after death, he managed, by his reviving fluid, to give again to the corpse all the appearance of life, so much so as to place it in a chair for photographic purposes. The Emperor and Empress of the French are said to be delighted with the discovery, which statement will in all likelihood be taken by most people *cum grano salis.* —*Lancet.*

DISINFECTANTS.

M. Bonjeán, an eminent pharmacien of Chambery (Savoy), has published a book on the means of preventing cholera, etc. Of course, his system rests on the use of disinfectants, among which he mentions—charcoal, well pounded, two pounds: sulphate of iron, one pound. Two or three tablespoonsful should be placed in the night vessels used by the sick. The author contends not only that carbolic acid is overrated, but that its virtues are *nil.* This should be noted. Be this as it may, it is perfectly true that fashion and crying up has an enormous deal to do with disinfectants. We should not, immediately a new one is proposed, forget chloride of zinc, manganate of potash, charcoal and green vitriol.—*Lancet.*

Mr. Syme has bid adieu to the use of the ligature, save in the tying of the larger arteries. He employs torsion; and after this operation is completed, he clears out the wound, using a weak solution of carbolic acid and water (one part to thirty), and covers the whole over with a paste containing carbolic acid, chalk, and other ingredients.

ORIGINAL COMMUNICATIONS.

THE MIASMATIC DISEASES OF CALIFORNIA.

By J. CAMPBELL SHORB, M.D., San Francisco.

(Continued from page 32.)

We have seen perhaps not more than six or eight cases of this Mountain Fever, and cannot therefore write from a very full experience; an experience which may, however, be enlarged before the conclusion of the subject of Miasmatic Diseases peculiar to California and the regions lying nearly in the same latitudes west of the Rocky Mountains.

The cases we had an opportunity of observing, all recovered ultimately; the disease yielding kindly to treatment from the outset. This is true in reference to the pyrexia alone; but some of the sequelæ were extremely difficult to manage, remaining steadily defiant to remedial measures, to an extent scarcely expected from the comparatively trivial character of the original visitation.

We have conversed with a great many intelligent men, outside of the profession, on the subject of this peculiar fever: with those who have suffered from it themselves, and with those who had opportunities of seeing a number of cases similarly affected. Though differing from them entirely in reference to the production of the malady, our own experience agrees in all essential particulars with their account in reference to its mode of invasion, symptoms, and consecutive troubles. We have never seen the disease exactly in its inception, unless the cases treated on the Umpqua River, in 1861, belonged to this order. Further on we shall have occasion to refer to these cases in connection with the theory mentioned at the conclusion of the last paper on this subject.

Outside of the profession, this fever has been regarded as the result of a disturbance of the circulation, consequent upon the removal of the atmospheric pressure. Non-professional observers, recognizing the chemical fact that the atmosphere is not of equal density in all its parts; that the stratum lying close to the earth at the level of the sea, sustaining the whole pressure of the superincumbent atmosphere, is more dense than that more highly elevated strata, familiar with the experience of æronauts, who found, in the upper regions of the atmosphere, respiration and circulation in the rarefied air attended with singular and appalling phenomena;—naturally enough concluded, in searching for the causes of the obscure febrile visitation, that the equilibrium of the circulation maintained by the ordinary atmospheric pressure, was disturbed at a high elevation, and from this disturbance sprang their Mountain Fever.

We believe the effects incident upon a sudden withdrawal of the atmospheric pressure are more or less ephemeral in their character, disappearing rapidly as the pressure is restored; and the experience of æronauts does not show that they suffered at the conclusion of their aerial voyage any serious discomfort other than that sometimes following an exposure to sudden changes of temperature, such as catarrh, or some trivial inflammatory disorder of the bronchial mucous membrane. If the theory be correct which ascribes this fever to the removal of the atmospheric pressure, and whatever is comprehended by it, we ought reasonably to conclude that those who were seized by it would experience immediate relief by leaving the high elevations on the mountains, and taking up a residence for a short time far below, in the valley or plain. Professional men, more or less influenced by the views of their associates in reference to the origin of this malady, have suggested removal of their patients to localities where the air was not so intensely rarefied; but the experiment has never met with such success as would warrant us in believing that the improvement in the symptoms was the result of the change solely in the location, for the paroxysms continued long after the period at which at which all the disturbances in the system springing from the removal of the atmospheric pressure would have been set at rest.

In studying the hidden sources of a disease so closely allied to that mass of morbid phenomena ascribed to the presence and operation of paludal poison, a disease which occurs in situations so far removed from such surroundings as would naturally suggest the probable existence of malaria—a disease whose home is the mountain brow, fanned by the purest winds of heaven, uncontaminated with the poisonous vapors that brood over the surface of the earth—there is one point which appears to us to merit especial attention. It presents itself here in connection with the occurrence of this fever, and will come up again in other connections, but the present seems the most appropriate place to consider it.

We feel confident that many take within their systems, while residing in or traveling through regions in which paludal poison is generated, the seeds of disease which never come to maturity. A larger class are seized immediately on exposure. Of this number some die, while others, by a devious path, find their way to health once more through repeated relapse and constant warfare with the numerous and serious consecutive troubles which contend for mastery over the system with such extreme pertinacity. In another class the germ of disease is planted, but its evolution depends on contingencies. It is developed when subjected to some exciting cause, or when the energies of resistance are weakened or destroyed by morbid processes, which have no association or connection with this pre-existing germ. Miasmatic disease is a very cowardly kind of distemper; as a rule, the weak are its victims. It only attacks the strong when bound hand and foot, or hunted down and weakened by some other enemy.

In the class last mentioned the violence of the miasmatic attack is measured by two circumstances—the amount of time which has passed since the period of exposure, and the character of the intercurrent trouble. Either lapse of time is able to dissipate paludal poison, or its peculiar force is spent in the destructive changes which are constantly going on in the economy under the active operation of the principle of life. We know that the ultimate structure of all organs and tissues is slowly burning up in the combustion of life; these very tissues which are intoxicated with the *materies morbi* are hourly consumed, and in the ash which finds an exit from the body through the various emunctories may be contained the harmless remains of this once powerful and treacherous poison. Digestion, which in one sense may be regarded as occupying antagonistic relations with life, is constantly pouring into the blood volumes of new and rich material from which each organ and tissue may select their appropriate nourishment, to take the place of that which life has used and then destroyed; and we may readily conceive how in this constantly recurring rejuvenescence of the organs the poison which infected the older atoms—those close on the verge of disintegration—is ultimately and entirely expelled from the body. The point in connection with the phenomenon of Mountain Fever we have to consider is, whether its occurrence cannot be attributed to the operations of paludal poison, which, up to the period at which it gave unmistakable signs of its presence, had remained latent and unrecognized in the system. The science of medicine is silent on the subject of the length of time during which this poison may retain its faculty of impressing the economy

in its peculiar way. It has not fixed or attempted to fix the time, and we scarcely believe it falls within the range of its possibilities to arrive at any nice measurement in this direction. This Mountain Fever which prevails here cannot be regarded as springing from the same conditions associated with the evolution of a form of miasmatic disease which desolates many portions of the West India Islands, and found to a considerable extent in certain localities in India, and called by the English army and navy surgeons, who were the first, we believe, to give to medical literature its name and cause, the "Hill Fever." The sources of this fever are obvious enough. Common experience teaches us, and the records of travelers furnish additional evidence of the fact, that rivers very generally arise in the hilly or mountainous parts of countries. Long continued rains, or the rapid melting of the snows where the mountains are very high, may wash into the bed of a river enormous rocks, large trees, and vast quantities of earth, which may become, when the freshet has ceased, insuperable obstacles to the onward progress of the now diminished stream. The water is thus arrested, becomes foul, undergoes decomposition, and diffuses itself into the surrounding regions, forming morasses of greater or less extent. Baked by a tropical sun, with an atmosphere above them still as that of a cavern, with no chance of renovation, these morasses speedily generate poisonous vapors surcharged with such deadly strength as to affect even the inferior animals, and the wild beasts of the country, impelled by instinct, abandon their homes and seek safety in flight. Our theory of the production of Mountain Fever, the sickly harvest of seed planted long before, and coming to maturity under conditions uncongenial with its perfect evolution, is based upon many reasonable considerations. This theory may not stand the test of time; it may be that at the present hour other observers are in possession of facts which render it untenable, and can demonstrate that in the surroundings of this fever there are found conditions sufficient to account for its presence without the necessity of referring it to the effect of antecedent poisoning. We advance our theory for what it is worth, ready to accept a better one as soon as scientific research shall have presented it to us. It must be remembered that the grand majority of our people have come to California by the Isthmus of Darien. It is by this route they come now, and will continue to come until the Railroad across the continent is completed. The time occupied in making the actual transit of the Isthmus varies from three to six hours, while the whole period during which passengers are exposed to the concentrated malaria of the place extends from fifteen to forty-eight hours. That this period is sufficient to sow the seed of miasmatic trouble is evidenced by its occurrence on the voyage from Panama to this port, and the number who fall sick shortly after their arrival in this city. We feel assured that the disease is the offspring of the tropics, for on the voyage down the Atlantic from New York the disease never occurs except in extremely isolated instances. This argument, which is *post hoc, ergo propter hoc,* would have but little force were it not supported by other facts which amount to a demonstration of the proposition. These facts will be considered when we come to that part of our treatise in which Panama Fever is described. Soon after their arrival the new comers disperse in all directions, going for business or amusement to all parts of our country. To the east of our city, as a rule, lie the vast mineral deposits which have given to California her wonderful prominence in the sisterhood of States, and there, too, are the mountain ranges, the home of the fever which we have been discussing. Towards the east, therefore, go the bulk of our traveling public. They pass in an incredibly short space of time from perfect summer into the regions of eternal frost, carrying with them, at best, insufficient protection to guard against the various troubles which are so sure to follow in the wake of such sudden and frightful changes of temperature. Miasmatic disease desires no better opportunity for an attack than the one offered here. Nature furnishes an important fraction of the paroxysm herself, the chill; which once commenced may proceed without her assistance to an indefinite extent; the fever follows, and here on the mountain's crest we see the birth of a disease which was conceived in the tropics, and born here in the mountains of California.

It may be urged as an argument against the correctness of our theory, that cases of Mountain Fever occur among those who never came to these shores by the Isthmus. Though not personally cognizant of the fact, we can readily perceive how such might happen without weakening in the least our position.

To reach California overland, from the East or South, the traveler necessarily passes through regions of country differing from each other in many respects—in height above the level of the sea, in meteorological surroundings, in physical and geological peculiarities. He passes through sections where all the conditions are present for the evolution of paludal poison—through the long, damp prairie, in the soil of which lie the remains of the tall, coarse grass which waved over it for a thousand years; by the banks of sluggish rivers, flowing through countries more or less flat, and where seepage keeps a vast extent of territory constantly filled with water, furnishing for the greater part of the year the essentials for the production of malarious exhalations. To such sources of disease is he frequently subjected on his journey toward the west, no matter what his point of departure. Beside, exposure at night, anxiety, inexperience, and the want of proper food and protection from the inclemencies of the weather, are slowly undermining his health and strength—a process which goes on more rapidly in proportion as his journey draws near its close; and on his arrival in the mountains, which look down on the sea, his system affords an admirable theatre for the operations of miasmatic disease, and he grows sick, perhaps dies, in sight of the promised land. In one instance, the germ of the disease was planted in the tropics; in the other, in the sickly prairies of the west; but it is the same kind of fever, attended by the same phenomena, amenable to the same treatment, and accompanied with similar results.

We have now considered the sources of this Mountain Fever. It remains for us to submit a short history of its symptoms and peculiarities, reserving our remarks upon the treatment until the period arrives in which the treatment of all the miasmatic diseases of the country is described.

A person about to be attacked experiences a general malaise for several days. There is a yellow tinge, more or less marked, about the eyes, which are generally injected, and lack expression; the tongue is slightly coated; the skin is harsh and dry, and the urine pale and plentiful. There is a disposition to drowsiness, which it is almost impossible to resist, a distaste for food, a sense of discomfort about the brow and eyes, not amounting to actual pain, and a feeling of weariness throughout the body, which at this stage of the disease is the most distressing symptom. Springing from the weariness, or associated with it, appears an unnatural indifference to considerations which, under ordinary circumstances, were objects of incessant care and attention; and to this must be added a tendency to depression of spirits, which no draft may clear away, or encouragement dissipate. After the preliminary stage, generally in the night, the person is seized with a severe chill. Coincident with the occurrence of the rigor come the intense headache and the frightful pains in the bones appar-

ently, or their periosteal investments, followed in the course of an hour, perhaps less, by the consecutive fever, which has different degrees of duration, generally terminating in three or four hours in a very profuse sweat. Throughout the paroxysm, as a rule, the intellectual faculties are singularly undisturbed, and in the sweating stage many of the disordered mental states disappear, and the patient expresses himself in better spirits than he has been for days. In some instances, however, the intellect is suddenly eclipsed; before the rigor is over and the flush of fever comes, the patient passes into a state of stupor, more or less profound, from which at times it is impossible to arouse him. The breathing is heavy and slow, the pupil dilated and insensible, and the pulse laboring and slow.

A NEW TREATMENT FOR CHRONIC DYSENTERY.

By E. MALCOLM MORSE, M,D., San Francisco.

Chronic Dysentery generally means inflammation and ulceration of the large intestine. Instead of expecting a cure by giving medicines by the mouth, to act through the blood, or to travel ten yards before arriving at the seat of the disease, or giving medicated enemas in so small a bulk that they are hardly sufficient to fill the rectum, I have been in the habit of washing out the whole rectum and colon by throwing up into the large intestine from two to five pints of Labarraque's solution of the chloride of soda, diluted, thus making a topical application to the ulcers, of one of the best, most cleansing, stimulating and healing solutions contained in our Pharmacopœia. This remedy gives little or no pain, is perfectly safe, and may be considered a specific in uncomplicated ulceration of the large intestine. By uncomplicated ulceration of the large intestine, I mean dysentery not kept up by organic disease of the heart, or phthisis pulmonalis; and not dependent on irremediable obstruction of the liver or spleen. For in each of these four cases the dysentery is produced by, or complicated with a more serious primary disease.

In presenting to the members of the medical profession, this plan of treatment for chronic dysentery, not found in any of the text books with which I am familiar, I would feel some hesitation, and not a little responsibility, did I not know that the theory itself is based on rational principles; and the success of the application of this theory as witnessed by myself during eleven years, is so marked that I can confidently recommend it as a safe cure for some of the worst cases of this formidable disease. I have seen patients that have been suffering for months and even years, with chronic dysentery, rescued by the application of these chloride of soda enemas, from the jaws of death.

The mortality in chronic dysentery, both under the old and the latest method of treatment, is very great. During the peninsular war there were seven thousand five hundred and twenty-six cases of it admitted into the military hospital; out of this number four thousand seven hundred and seven died. Allowing for mild cases, about one man out of every three taken with this disease perished. It is well worthy of remark that the remedies relied on then were very much the same that are used at the present day in dealing with this malady. Dr. Aitkin quotes from Dr. Bryson on this subject: "I have seen all the astringents, both mineral and vegetable; mercury, both externally and internally, with many other medicines, tried without any benefit, but there were some means which were useful in relieving the more urgent and distressing symptoms, and, as it were, alleviating the passage to the grave." Austin Flint, in his recent work, says; "Chronic dysentery is one of the most intractable and hopeless of diseases." Dr. Bennett, in his work on the practice of medicine, speaks in the same way of these cases: "Indeed, it cannot be supposed," he says, "that where actual ulceration exists over a considerable portion of the colon, any remedies can produce an impression on the alvine discharges." The usual remedies so often fail, because generally they do not *touch* these ulcers, and when they do reach them, it is only after they have undergone chemical changes, and are diluted by intermixture with the alvine discharges.

On examination of the bodies of those who have died with this disease, we find the mucous membrane of the large intestine extensively ulcerated; very often the ulcers are low down; they are found principally in the rectum and descending colon; often in the transverse colon and cæcum. Dr. Wood says: "The mucous membrane of the rectum and the lower portion of the colon always evince signs of inflammation in cases of death by dysentery. It is much reddened and thickened, and not unfrequently ulcerated. Ulcers, in fact, exist in this disease more frequently than in any other acute inflammation of the alimentary canal, unless in the follicular enteritis of typhoid fever and smallpox. The danger is proportionate to the extent of the colon involved." Now, if we have a patient suffering from a simple ulcer in the mouth, we do not attempt to heal it by throwing up astringent or opiate enemas into his rectum; we apply the remedial agent directly to the seat of the injury. And if we have a patient with ulcers in the colon, why not apply the proper medicine at once to the proper place?

In order to get the patient into a proper condition to derive the most benefit from these injections, I am in the habit of pursuing the following method: I regulate his diet carefully, of course, and keep him in a recumbent position in order to assist the return of the blood from the engorged mesenteric veins, and those smaller tributaries which are distributed along the large intestine. This state of engorgement prevents the ulcers from healing, and renders each ulcer an outlet from which, in blood and serum, the stream of life ebbs out like water from the tubs of the daughters of Danaus. At day-break on every alternate or fourth day, I give a mild cathartic or aperient, in order to clear out the alimentary canal. The ordinary contents of the intestine produce great irritation when it is in this engorged and hyperæsthetic condition; and it is better to get rid of the fæces about the same time, instead of letting them run in driblets over the raw surface every hour or two. After the cathartic or aperient has acted sufficiently, I inject very slowly from two to four pints of Labarraque's solution of chloride of soda, diluted, into the large intestine; in this way it becomes a topical application. The right strength for the first enema, is twenty parts of water to one of Labarraque's solution. I inject as much of this mixture as he can be made to retain. Two or three pints will generally be enough. Sometimes as much as five pints may be given. Each enema should be made a little stronger, until the patient says that he can feel it smart or burn. When this happens, the solution is of the proper strength. The patient should be on his right side, or on his knees with his head low down, while these enemas are being administered. Occasionally it is necessary for him to change his position several times, in order that the wash may reach every point where it is needed. Should there be much tenesmus after the injection has been passed, I give an enema of the tinct. opii, or an opium suppository. These applications of the chloride of soda should generally

be made once a day. Occasionally it is necessary to give them twice a day; and sometimes on account of the sensitiveness of the ulcers as they begin to heal, it is better to leave them off for several days, or give weaker solutions. The next indication in the treatment, after cleaning out the alimentary canal and washing the ulcers with the medicated solution, is to keep the bowels quiet, so that the ulcers may remain clean and heal up under the topical application. In suggesting the means of accomplishing this desideratum, I am getting upon very debatable ground. The old proverb, "tot homines tot sententiones" must certainly have been intended for physicians. Each one of us has his own way of using the arms with which we combat disease. I generally give large doses of subnitrate of bismuth, three times a day; repeated opiate enemas and suppositories, in order not to disorder the stomach; Dover's powders, repeated if necessary; charcoal, or the mineral and vegetable astringents; the antacids, leeches and fomentations; taking great care to *keep up* the effect of the medicines, by giving them every hour or two. If one drug fails I try another, or give a combination of several of them; in order to have as few stools as possible passing over the ulcerated surfaces while they are healing.

The method of treatment of dysentery recommended by Dr. Scott of this city, in his valuable article published in the August number of this journal, can, I think, be advantageously combined with this method. Dysentery, as I have already said, often becomes complicated on account of disease of the heart, liver, phthisis pulmonalis, and enlargement of the spleen. In these cases the appropriate remedies for each of these diseases must also be given. In enlargement of the spleen produced by intermittent fever, quinine and iron, and removal from the miasmatic region, by diminishing the size of this organ relieves the pressure on the splenic vein, and prevents the backing of blood through its tributary, the inferior mesenteric vein, on the rectum and descending colon. Disease of the liver often produces dysentery, and *vice versa*, dysentery often produces pyæmia and suppuration in the substance of the liver from the absorption of pus. Very large enemas of water have been tried in India in dysentery, and were said to be very beneficial. Ipecac has also been tried in large enemas, and with marked benefit. A distinguished physician of this city informed me that he knew an old man in South America who could cure cases of dysentery that seemed to be hopeless. The medicinal agent which he used was a secret known only to himself; but he performed these cures by means of large enemas, and was accustomed to travel around armed with his favorite weapon—an immense injection pipe. I believe that carbolic acid diluted with water, and given in the same way as these chloride of soda enemas, would also be valuable in this disease.

In closing this article, which, though crude and hastily written, has given me considerable trouble, on account of my being unaccustomed to this kind of work, I must request my medical confréres not to regard it with too critical an eye. Any trouble that I have taken will be more than repaid to me, if in recommending these large enemas of chloride of soda in chronic dysentery, I am giving a valuable and practical hint for the treatment of a disease which stands in the foremost rank of the opprobia of medicine.

A CASE OF ACUTE CHOREA SUCCESSFULLY TREATED BY THE EXTRACT OF CALABAR BEAN.

By THOMAS BENNETT, M.D.

In that really excellent work on medicine now in course of publication in England, and edited by Dr. Reynolds, in which the best men of the day, in that country have, written on subjects they best understand—we naturally expect, and we are not disappointed in finding, all that is modern and all that is worth knowing on the pathology and therapeutics of disease.

In the second volume, which is devoted to *General Nervous Diseases*, Dr. C. B. Radcliffe, in his article on chorea, says "Nothing can be more perplexing than the statements made by various authorities respecting the efficacy of remedial agents in the treatment of chorea. Few voices, it is true, are now raised in favor of the old fashioned antiphlogistic way of treatment, in which blood-letting, and purgatives, and low diet figured so conspicuously; but beyond this, all that is uttered seems to be dictated by the spirit of contradiction or scepticism. Indeed, so little unanimity of opinion is there, respecting the treatment which ought to be pursued in chorea, that the only course is for each one to glance at the remedial agents recommended, to weigh the statements made respecting them as well as he can, and to take upon himself the responsibility of deciding upon his own course of action." He then goes on to enumerate the various remedial agents that have been found useful.

Sir Thomas Watson and Dr. Elliotson rely, as a rule, mainly on some preparation of iron. With others, sulphate of zinc is the favorite. Then we have advocates for arsenic, strychnia, tartar emetic, the iodide and bromide of potassium, turpentine and ammonia. Dr. Radcliffe says that his plan of treatment for an ordinary case of chorea is to give cod liver oil in conjunction with hypophosphite of soda; and to combine with it, according to circumstances, camphor, or ammonia, or both; he adds the sesquicarbonate of ammonia to the draught containing the hypophosphite, and dissolves the camphor in the cod liver oil. He has added arsenic to the hypophosphite and cod liver oil, and has been satisfied with the result.

It is in view of the uncertainty of these conflicting favorites, and in the hope of abating somewhat the disappointment all must have felt in the treatment of this disease, that I am induced to narrate the striking benefit derived from the use of the extract of calabar bean (physostigmatis faba) in a case of acute chorea.

I am sorry I have no notes of the case; it occurred, however, recently, and its details are so vividly fixed in my mind, that I can give a truthful description of it:

M. A., fourteen years old, a stout girl, of full habit of body, very large for her age, had once menstruated. Her mother for some time had observed a certain awkwardness of gait, and a jerking way of taking hold of any object; and thinking it was only a child's trick, rested satisfied with reprimanding her for it. She, however, got daily worse, till at last she was not an instant quiet, and was unable to hold anything in her hands or even walk across the room. Being then sent for, I found her in the condition just described; her face was flushed, saliva escaped constantly from her mouth, her tongue was loaded with thick brownish fur, and her bowels were obstinately constipated. I ordered her a drachm of turpentine in an ounce of castor oil, that night, and a mixture containing valerianate of zinc for the next day. Two days after, I saw her again, and found all her symptoms much

aggravated—incessant violent motions of arms and legs, and considerable difficulty in speaking. A repetition of the oil and a continuance of the mixture was ordered; but these measures had not the least control over the disease, and after the interval of a week her condition was pitiable in the extreme. Her countenance now was semi-idiotic; she was deprived of her power of speech, and her ability to swallow was almost gone; her wrists, elbows and knees were deprived of their cuticle from constant rubbing; all voluntary power over her muscles was lost; she was not one instant quiet, but incessantly threw herself about with sudden violent jerks into extraordinary attitudes—at one moment she would jump on her feet and as quickly fall back, at another her arms would be rapidly thrown behind her back and then twisted. Sometimes her relatives would try to keep her quiet by holding her down on the bed, but the choreic strugglings were too powerful for her father, a strong, muscular man; she would writhe from under him during these paroxysms, though he both held, and threw his whole weight upon her. During these terrible attacks she would utter piercing cries, and her mouth would be covered with bloody foam, caused by the constant working of her jaws and the biting of her lips and tongue. Night brought no relief, as sleep was entirely absent.

Finding that the treatment hitherto had been entirely useless, I now ordered the eighth of a grain of the spirituous extract of calabar bean, to be given every two hours, and an occasional spoonful of egg beaten up with brandy, so as to recruit her exhausted nervous system. The beneficial effect of the physostigma was most marked. In twenty-four hours the violent paroxysms had all but ceased; the second night she slept quietly for seven hours, and awoke with a countenance less flushed and more intelligent; she was able to take a little food and also to speak, although in a thick and hesitating manner. The medicine was ordered to be continued, and at the expiration of four days all that remained of the choreic symptoms was some little muscular twitchings; but she had sufficient power over her hands to pick the kernel from a hickory nut, at which occupation I found her at my visit. The calabar bean was now discontinued, and its place substituted by iron and quinine, with a dose of black draught every other morning, as her bowels continued constipated. She rapidly convalesced, and I took leave of her when she went into the country for a change of air.

I am fully aware that not much reliance can be placed on a single trial of the calabar bean in an acute case of this disturbance of the nervous system; but I report it with the hope that others may be induced to give it a trial, and may meet with a similar successful result.

ABDOMINAL WOUND TREATED BY OPIUM.

By W. F. McNUTT, M.D., M.R.C.S.E., L.R.C.P.E., etc.,

Late U. S. N., Surgeon to S. F. Dispensary, etc.

Mrs. McL——, aged thirty, complexion fair, slight built, rather delicate constitution, and mother of four children. July 1, 11 o'clock, A.M., 1867, while crossing the door-yard from her house to the barn, was gored by a cow. The horn penetrated the abdominal wall, about one inch and a half above the center of Poupart's ligament, left side. The external wound extended upwards about three inches, and across nearly to the linea alba; the wound through the peritoneum was about two inches long.

I arrived about forty-five minutes after the accident, found the woman in a state of collapse, countenance blanched, extremities cold, pulse weak, and the greater part of the small intestines protruding from the wound. I administered a little brandy and water, and put bottles filled with hot water to her feet and legs. Reaction soon commenced, and when she had nicely rallied from the shock, I gave her one grain of opium. I then added a little Castile soap to a basin of warm water, and washed off the sand, gravel, and chips which were adhering to the bowels. The bowels were not lacerated, but showed several unmistakable marks of contusion. The abdomen and chest showed several ecchymosed spots from the tramps of the cow.

Having got the bowels washed, I administered chloroform; returned them and brought the wound together by interrupted sutures; applied a compress and bandage, the compress to be kept wet with ice water. After administering the chloroform, Dr. McClatchey, who happened to be in town, arrived and assisted me by attending to the chloroform.

We then removed her from the sofa, and placed her in bed on a hard mattrass, and ordered one grain of opium every second hour, the room to be kept quiet. Allowed her a little brandy and water until she rallied from the effects of the chloroform. Saw her at 7 P.M., eight hours after the accident; she was lying quiet, feeling warm, pulse weak at 100, countenance pale, and moaned occasionally, she said, "not from pain, but distress."

Continue opium as ordered. Ordered a few spoonfuls of beef tea, and allowed her one tablespoonful of ice water occasionally during the night if she asked for it.

July 2d.—Seems easy, no moaning, dozes most of the time; takes a spoonful of ice water about every hour, and occasionally takes a spoonful of beef tea; opium, one grain every third hour.

July 3d.—Pulse 100, full and soft; patient easy; remains quiet and dozy; takes ice water and beef tea as yesterday; ice water to wound as ordered; more color in face to-day.

July 4th.—Patient a little restless; pulse 120; harder than yesterday; takes more ice water; tongue a little furred; countenance feverish; opium, one grain every second hour; ice water to head; arms and chest sponged with cool water.

July 5th.—Pulse 110; otherwise patient about as yesterday; continue treatment.

July 6th.—More quiet; pulse 100; softer than yesterday; less feverish; opium, one grain every third hour; continue ice water and beef tea.

July 7th.—Patient easy; no pain; scarcely any fever; opium, one grain every fourth hour.

I continued to see my patient once and sometimes twice a day until the 1st of August. I gradually lessened the opium and increased the nourishment, adding egg-nog to the beef tea after the fifteenth day. On the 10th the descending colon seemed loaded, and was emptied by a small injection; occasioned no pain. On the 14th, bowels were moved by a small dose of castor oil; she said bowels seemed sore, but motion caused no pain. On the 26th, stood on her feet for a moment; sat on the chair while her bed was being changed.

After August 1st, commenced walking across the room from her bed to her chair; no pain unless she straightened herself up quick, when she felt a sharp pain in the seat of the wound. In October, when I last saw her, she was going about the house as before the accident, but wore a bandage and compress when she felt tired, as she said the left side felt weaker if she walked far.

This case was interesting to me, as being a very proper case for profuse bleeding, and for the most liberal use of mercury, in the palmy days of the lancet. Then, most persons receiving

a bad abdominal wound were sent to their graves with very little blood in their bodies, but a great deal of mercury.

July 4th, when the patient seemed feverish, pulse 120, I was advised by a graduate of '35 to add calomel to the opium, in order, as he said, to be prepared to produce salivation at once, if peritonitis lighted up. As I had never given mercury for traumatic fever, I was not ambitious to try it, and I declined; but was prepared, if peritonitis did light up, to increase the opium, having, during the late war, always treated wounds of the abdomen by opium.

REMOVAL OF A PORTION OF THE INFERIOR MAXILLA, FOR A FIBRO-CARTILAGINOUS TUMOR.

By WM. H. DAVIES, M.D., M.R.C.S.E.,

Assistant Surgeon to the California State Woman's Hospital.

This case contains a point of such interest to the profession, that I trust I may be pardoned for giving the details of an operation apparently so simple:

I—— S——, æt. 10, was brought by his parents to consult me about a tumor involving a portion of the right half of the inferior maxilla. The tumor had been correctly pronounced by several surgeons to be fibro-cartilaginous; but the point to be determined was the operation necessary for its removal—whether the tumor could be removed without taking with it any portion of the maxilla. I advised the removal of the tumor, and a portion of the maxilla, to which they readily agreed; and two days after, the patient being under the influence of chloroform, I proceeded to perform the operation advised by Mr. Syme, by making an incision downwards from the angle of the mouth, thence along the tumor to the extent of about six inches. Having carefully separated the flap from the tumor, I extracted two teeth, so as to permit of the more easy division of the bone, and having partly sawed through the jaw, completed the division with strong cutting pliers, and having turned the bone outwards and separated its connection with the muscles and mucous membrane of the mouth, completed the operation.

I then lightly plugged the cavity with lint, brought the ends of the divided maxilla as nearly in line as possible, by strong silver wire attached to the teeth, and carefully approximated the edges of the wound by silver sutures; applied a bandage, which I ordered to be kept constantly wet, over the whole line of incision. The patient was fed by means of a tube and nutrient enemata. The sutures were removed on the sixth day, and by the tenth I had the satisfaction of seeing complete union of the entire wound. On the twenty-first day I allowed him to go home, and did not again see him for about five weeks, when I found the space between the ends of the bone nearly filled up by a tough semi-tendinous structure, and the whole jaw tolerably firm. I did not see him again for three months, when he presented himself, a perfect picture of good health, the side operated on being rather a better shape than the sound one; but, on opening his mouth, I was greatly surprised to find in the centre of the new structure a perfectly formed tooth. For this I can by no means account. The portion of maxilla was completely removed, not even a piece of periosteum being left. Whence, then, the tooth? I have not been able thus far to hear of any similar case. Up to the present time, the boy remains perfectly well, using the right as freely as the left side, and employs the new tooth as a means of mastication.

THE PUBLIC HEALTH.—THE PUBLIC RESPONSIBLE FOR THE DIFFUSION OF SMALL POX.

By J. CAMPBELL SHORB, M.D., San Francisco.

Last week we had the pleasure of conversing with a well known physician of our city, a gentleman in large practice, and one who takes care to keep himself perfectly *au courant* with all the improvements of medical science, and we were rather startled by his vehement denunciation of the practice of re-vaccination. His dread of re-introducing an animal poison into the system seemed so genuine, and his positive declaration that he denied re-vaccination to the members of his own family, and except under protest would not re-vaccinate his clients, led us to believe that some new work, to us unknown, had been published, demonstrating the dangers of re-vaccination, by proving the inoculability of disease of a cutaneous or glandular character through the medium of the vaccine virus.

We remembered that at the time the immortal Jenner gave his discovery to the world of science, there was a hue and cry against the practice of vaccination. We know that every now and then since that time, some of the lesser luminaries of medicine, they who shine by the sickly aid of reflected light, had attacked the discovery of Jenner; their fate being the fate of the giants who would scale the heights of Heaven. We recalled how, as often as the rumors of these attacks gained any publicity or were undermining public faith on the subject, science had with solemn emphasis pointed to her records, and defied her misguided children to make good their assertions against the discovery which, without any irreverence, we might almost call *the sacrament of medicine*. But we did not know that any great man had linked his name with an attempt to underrate the efficacy of vaccination, or to cloud it with the suspicion that it was "the direful spring of woes unnumbered" to the human family. Our conversation with the physician to whom reference has been made, was terminated so abruptly, that we had no chance of learning whether his eloquent invective sprang from an idea or prejudice of his own, or whether it was the result of the adoption of new views on the subject recently given to the profession. Though not at all shaken in our ancestral faith in reference to the safety and advisability of re-vaccination, we confess having felt a strong desire to probe the reason of the faith we had within us, and with this view have consulted the best and latest authorities; and as we rise from our readings, our heart is full of courage, our faith has received fresh increments of strength, and the half whispered prayer is on our lips that the genius of medicine may never forget him, who, after The One who was betrayed in Jerusalem, was the greatest benefactor to the human race that has ever lived.

In discussing the question of the public health, our attention is naturally directed to the subject of the small-pox epidemic, it being for this month, as it was the last, the salient point for consideration; and though the following reports from the Health Office and the Small-pox Hospital indicate a very sensible decrease in the number of cases compared with that of July, they do not demonstrate that the means which science has put in our hands to check the progress of this scourge, have been used with the celerity and universality which the presence of such a horrible and deadly pestilence demands.

We desire to show that our caption is correct, that the public itself, or its authorities, are responsible for the diffusion of small-pox. Science declares that vaccination or re-vaccination will check any outbreak of variola. Science further declares

there is no danger whatever in the means. To demonstrate the truth of this doctrine we submit the following facts:

Dr. Seaton, Medical Inspector to the Privy Council in London, whose exhaustive treatise on vaccination has just been published, contends that the doctrine teaching that new, strange and unheard of diseases have been developed by vaccination—that degeneration, physical and mental, has followed in the wake of universal vaccination—is too weak and nonsensical to be tolerated for one instant; and further tells us that the diseases "produced by vaccination occupy in medical teaching and medical conversation about the same space as diseases produced by witchcraft or the evil eye." He shows the allegation that the practice of vaccination has led to an increase in the mortality of other diseases, is directly opposed to statistics. Comparing the general death rate of the middle of the last century, in any country where systematic records are kept and where the essentials for a comparison are found, it is shown, after deducting the small-pox gain, the present rate is greatly below that which obtained before the date of vaccination. Take London, for instance, in the middle of the last century; the death rate from all causes was 355 per 10,000 of the population; or, taking small-pox out of consideration, it was 325; but in the middle of the present century, including small-pox, it was 249; and the experience of London in this respect is not a solitary one. All over the world, where the science of medicine is properly cultivated, and where the desire exists to advance the interests of humanity by keeping such records as will aid philanthropy in realizing its objects, the same truth is apparent; the annual death rate is steadily diminishing, and has been doing so since the days of Jenner. This diminution, of course, can be traced to many causes. The science of medicine has been steadily progressing, and the various forms of fever, which in the long ago depopulated countries and filled their cemeteries, are now so entirely under the knowledge of science and the control of medicine, that they are shorn of all their terrors and nearly all their dangers. Quinine and arsenic, separate or combined, master the intermittent and remittent fevers. Proper food, phosphorus and brandy hold up the energies of life while they are fighting the typhus and the typhoid. Iodine, iron and codliver oil stay the progress of glandular and scrofulous diseases, sometimes driving them forever from the system. But in studying the causes of this diminution we must not overlook the part that vaccination plays in the accomplishment of this important fact. The experience of a host of the most eminent observers is, that *the* terror of the natural small-pox is concealed in its depressing influence on the energies of the system, paving the way in those disposed to the development of tubercular and other scrofulous diseases. By preventing small-pox, therefore, much good is accomplished in the way of checking the ravages of tubercular malady. Indeed, Jenner himself was not blind to this truth, and, in announcing his discovery, expressed the hope that in an indirect way it might prevent the evolution of scrofulous affections. Dr. Alison, in one of his valuable papers bearing on the subject, writes: "Having often seen scrofulous, especially tubercular diseases; originating during the feeble state of convalescence from bad small-pox, and being aware that small-pox before vaccination was introduced was always stated to be a mutilating when not a fatal disease, I have no doubt that whatever prevents small-pox in a population will save many of that population from scrofulous and tubercular disease otherwise to be fatal to them."

Dr. Seaton tells us that in 1856, in London, the medical officer of the then Board of Health addressed to the same members of the medical profession whom he consulted as to their opinion on the protective power of vaccination, the further question: "Have you any reason to believe or suspect that vaccinated persons, in being rendered less susceptible to small-pox, become more susceptible of any other infective disease, or of phthisis; or that their health is in any other way disadvantageously affected?" "Of 542 respondents, there was not a single one who gave the slightest support to the hypothesis."

The occurrence of glandular swellings and cutaneous affections after the period of vaccination, though regarded by the vulgar mind as the direct result of blood poisoning through the vaccine virus, has never been regarded in that light by the intelligent members of the profession. Dr. Hunt, Physician to the Western Dispensary for Diseases of the Skin, says in relation to this matter: "I can confidently say, after examining and recording the history of upwards of a thousand cases of skin disease in children, that I find no evidence whatever that vaccination disposes the constitution to cutaneous diseases, these appearing, in fact, to attack indiscriminately the vaccinated and the unvaccinated. Of course, since the compulsory vaccination act has been in operation, we have had more cases of skin diseases after vaccination than we formerly had, simply because children are now vaccinated at or before three months instead of at six, eight, ten or twelve months of age. Therefore, a cutaneous disease which breaks out after the third month, necessarily occurs after vaccination. Formerly, it might at that age have occurred before vaccination. The date of vaccination has made the disease a *sequence*, not a consequence of vaccination."

Dr. Marsen, whose experience in the treatment of infantile disease is second to none in the world, was firm in his belief of the non-communicability of disease by vaccination. He declares that in the performance of 60,000 vaccinations he had never seen other diseases communicated with the vaccine disease; and Drs. West, and W. Jenner, and Mr. Leese, under whose care over 100,000 people, young and old, were vaccinated, give their unqualified endorsement of the correctness of Mr. Marsen's records. After a long experience among children at St. Bartholomew's, in discussing the various causes which have a tendency to develop cutaneous diseases in young children, he says: "Now, vaccination may do, though I believe it very rarely does, what these several accidents may do, namely, by destroying for a time the general health, it may give opportunity for the external manifestation and complete evolution of some constitutional affection which, but for it, might have remained rather longer latent. This is the worst thing that can, with any show of reason, be charged against vaccination; even this can very seldom be charged with truth."

In reference to the danger of the communicability of syphilitic poison, through the medium of the vaccine virus, Dr. Seaton holds that enlightened medical opinion deems such infection impossible. Of course, syphilis is an inoculable disease, but the inoculation which produces it is the inoculation of its own infection from the sore, and cannot follow from vaccinia.

Dr. Marson and Mr. Leese never found, in their immense vaccination experience, anything to countenance the belief that vaccine lymph had on any occasion been the medium of carrying the syphilitic infection into the system; and Mr. Tomkins, the Inspector of Vaccination of the National Vaccine Establishment, who vaccinated 50,000 children, and whose experience of the whole operations of the establishment embraces thirty years of its history, declares that no instance has ever come to his knowledge of syphilis having been communicated by vaccination.

It is weak and useless, in the face of such authorities,

against the plain teachings of the accumulated observations of noted men, not confined to one time or country, to attempt to establish doctrines at variance with their experience. There is not a subject in the whole range of the science of medicine upon which is concentrated such a wonderful unanimity of enlightened medical opinion, as there is upon the perfect safety and efficacy of vaccination and revaccination.

How in this age of the world, then, in a country which prides itself upon its progress and intelligence, an epidemic of small-pox is allowed to proceed in its devastating career, is a problem whose solution can only be found in the folly, perversity, recklessness or prejudice of mankind.

The first case rings the alarm, and the rumor sweeps swiftly over an entire city, that the disease of nameless horror and filth is among us. Delays, always dangerous, are here criminally so. It is our plain and manifest duty instantly to avail ourselves of the protective influence afforded by vaccination, and thus individually and collectively stamp out the disease. Of those who died during the present epidemic we will not speak—"*De mortuis nil nisi bonum;*" but for the living—those who have taken the small-pox and recovered—we cannot say we feel any particular amount of sympathy. That they are barely tolerated by their relatives and friends, and are repulsive to the public, that their faces are seamed, pitted and deformed, they have themselves alone to thank; and if in the future, with the energies of resistance dissipated by the poison of variola, diseases come upon them, which, but for their carelessness or ignorance, might have remained latent indefinitely, nor materially shortened their days, the responsibility falls upon themselves and upon no one else. Science has asked them to take her shield, but if they turn a deaf ear to her entreaties, and treat with contempt her solemn suggestions or injunctions, they must not blame her if they fall victims to the pestilence of the times.

REPORT FROM HEALTH OFFICE.

Cases of variola reported during August	136
Cases died during August	62
Convalescent, or result still unknown	74

REPORT FROM SMALL-POX HOSPITAL.

Cases of variola admitted during August	31
Cases died of variola in Hospital during August	10
Cases cured in Hospital	10
Cases remaining in Hospital	15

We learn at the Health Office that only one-fourth, probably, of all the cases of variola and varioloid in our city are reported to the office. We have every reason to believe this statement perfectly correct, and we feel we will never know, until the pestilence shall have disappeared entirely, what a terrible scourge it has been to our city, or how strongly founded in fact is our caption—"The Public is Responsible for the Diffusion of Small-Pox."

SYPHILIS.

By W. F. McNUTT, M.D., M.R.C.S.E., L.R.C.P.E., etc.
Late U. S. N., Surgeon to S. F. Dispensary, etc.

Whether the lecherous Syphilus did insult Apollo, and by his temerity brought upon the human race this fearful disease, syphilis, or whether the imaginative Fracastoro wished to teach his fellow mortals that great moral lesson, viz., "the way of the transgressor is hard," seems, with many, to be a question. And whether Syphilus contracted the disease, or whether Apollo caused a virus to be made with which Syphilus was inoculated, unfortunately, the poetic Fracastoro forgets to mention. My belief is, however, that Syphilus did insult Apollo, and that Apollo caused a virus to be made of some fermentative preparation of mercury, which has not come down to us, with which Syphilus was inoculated.

A strong argument in favor of mercury being the drug from which the virus was prepared, is in the fact that the two diseases, syphilis and mercurialization, in their invasion, progress, and results, are nearly identical; and that there is no other known medicine, when introduced into the system, that will produce similar results. I say nearly identical. The similarity between the third stage of the diseases depends very much upon the treatment adopted. Syphilis will, if left alone, mostly end in resolution with the secondary symptoms; while mercurialization, when it reaches the secondary, must necessarily continue its march to the tertiary, and must result in the death of the individual, provided the system be kept charged with the poison. And though the outward supply be cut off at the secondary stage, unfortunately there may be sufficient undissolved mercury in the system, which will slowly undergo a chemical change, and be set free in the blood, to drive the disease on to the tertiary form; while with syphilis, the system can only be once charged with the poison. There is no means of keeping up the supply from without, as in mercurialization. Like the virus of variola, it protects the system against itself.

The fact that the system cannot be kept charged from without with the virus of syphilis, is due, no doubt, to our not being in possession of the original preparation of mercury with which Syphilus was inoculated. This theory is strongly supported by the fact that if any common preparation of mercury that is known to us be introduced into the system (in proper doses, and for a sufficient length of time) of a patient with secondary syphilis, it will prevent the syphilis from terminating in resolution, as it probably would have done, and will drive it on to the tertiary stage. The pathological condition of the tertiary stage so closely resembles mercurialization, that many pathologists have gone so far as to call the tertiary symptoms mercurial and not syphilitic. Such pathologists may be learned men, but have surely allowed their prejudices to run away with their judgment.

There is strong presumptive evidence that Widman was aware of the mercurial inoculation of Syphilus, and that it was upon the same principle that he used mercurials externally in syphilis, that the moderns employ syphilization, and that the principle upon which his remedy cured syphilis, was as clear to him as the curative principles of modern syphilization is to its advocates.

Having thus far confined ourselves to facts, let us use our imagination a little, a precedent for which we can find in any work that ever was written upon syphilis. Let us imagine that the formula for the fermentable preparation of mercury was burned at Basil by that impudent pretender and quack, Paracelsus, and that he, to gain notoriety, conceived and promulgated the dogma that "like cures like," upon the strength of which he prescribed mercury for syphilis; and that it was the failure of mercury to cure syphilis that lost him his notoriety, and caused him, at the end of two years, to be driven from Basil.

This theory of the origin of syphilis has at least the merit of being as feasible as the hundreds of pages of grave bosh that has been written on its origin.

Syphilis, like most other diseases, cannot be properly studied and understood while the patients chosen for subjects of study are under the influence of treatment that greatly modifies the invasion, progress and result of the disease. That

mercury does modify the time of incubation, the invasion, the progress, and the result of this disease, syphilis, is a fact beyond dispute. And that most of our ablest writers on the subject have studied the disease, not while running its natural course, but as modified by mercury, is also a fact, and is undoubtedly the principal reason why our knowledge of the pathology and treatment of syphilis is at present so very unsatisfactory.

First, then, we believe that there is a syphilitic virus which, being introduced into the tissue, infects the whole system, and which reproduces itself in the form of purulent matter at the place where it was introduced, and in like manner, under similar circumstances will continue to reproduce itself. But like the virus of variola, it is subject to the same law, of infecting the system but once.

2ndly. We believe the source of the virus to be a sore or chancre, yielding pus; but that the sore must not be in the act of healing, and that the pus must not be putrescent.

3dly. That if the pus be taken from a chancre at the proper time, and any person be inoculated with it, specific effect will follow, provided the person had never before been inoculated with the specific virus.

4th. That the sore produced by the inoculation of the specific virus has the characteristics of the parent sore.

5th. That there are two varieties of chancres or sores, known as hard and soft chancre, or chancre and chancroid, but should be called local and constitutional, only one of which produces the specific virus; and that we cannot, by a microscopic or chemical examination of the pus yielded by a chancre, discover which is the local or which is the constitutional chancre. That in a great number of chancres no surgeon can say for certain whether they are local or constitutional, or whether they will or will not be followed by constitutional symptoms. The difference between a characteristic chancre of each variety is marked, and an experienced surgeon can pronounce with nearly a certainty that the hard chancre will be followed by constitutional symptoms, and with almost as much certainty that constitutional symptoms will not follow the soft chancre; but that very many chancres are not so characterized as to be easily diagnosed.

Every chancre, then, can produce a chancre; every chancre cannot produce constitutional effects. Either variety of chancre may produce enlargement of the glands of the groin—bubo; but the production of bubo depends more upon the constitution of the patient, the treatment of the chancre, and the care that the person gives himself while suffering with the chancre, than it does upon the character of the chancre. The pus from a bubo caused by a constitutional chancre is capable of reproducing a constitutional chancre.

The soft, or local chancre may present the following appearance, viz., an ulcer whose edge is sharply defined, surface irregular and worm-eaten like, and of an ashy color; base may or may not be thickened, never indurated. The discharge is generally thin, copious, and sanious. Its tendency is to extend itself by invasion, or to multiply itself. In bad constitutions, or as the result of bad treatment, it may take on a phagedenic form.

The hard, or constitutional chancre, shows an edge less sharp, raised above the centre of the sore, surface less irregular, discharge less and thicker than the soft. The base indurated, the ulcer generally single and less painful than the soft; rarely ever takes on the phagedenic form. It occasionally may, however, when mercury is freely given, to scrofulous, debilitated patients. Buboes do not often follow the indurated or constitutional chancre, unless the sore be converted into a large or deep painful sore by the injudicious use of caustics, or the chancre take on the phagedenic form.

In the treatment of chancres, caustics of any kind should never be used, except the nitrate of silver. Every chancre should be destroyed, if seen, as early as the 4th or 5th day (unless it has already extended its limits by invasion). First, because the chancre may or may not be an infecting one. If it be an infecting chancre its early destruction may prevent the absorption of the specific virus, consequently prevent constitutional symptoms. If it be a local chancre, its destruction will prevent it from spreading by invasion, and will generally prevent the formation of buboes.

The whole chancre, or part of its surface at one time if it be large, should be seized and raised with a fine rat-tooth forceps and clipped out with a pair of scissors curved on the flat; bleeding prevented by nitrate of silver or tinct. ferri ch. This treatment thoroughly destroys the chancre, and may prevent the infection of the system, if the chancre be hard; or prevent its spreading by invasion, if it be soft, and almost effectually prevents buboes in either case. The sore caused by nitric acid, etc., is painful, and likely to be followed by buboes. If the chancre be a spreading one, it may be brushed with a strong solution, or rubbed with the stick of nitrate of silver, and dressed as the sore that has been clipped, viz., the sore filled with bismuth, and lint applied, kept saturated with alcohol and camphor, or a paste of olive oil six parts, carbolic acid one part, thickened to a paste with prepared chalk. The phagedenic chancre should be treated as the invading chancre, always giving quini sulpht. and iron internally, with stimulants if required. Whichever dressing be used, it should be removed three times a day, and the wound cleansed thoroughly with water and castile soap. Either dressing will answer the indications that common sense would dictate to be requisite. The tendency of either dressing, applied to a sore, is to prevent the formation of pus, to contract the absorbing vessels, to stimulate the wound, and to act as disinfectants. Tartarized iron gained some repute as a dressing to spreading and phagedenic chancres, because any astringent lotion applied to such a sore, while iron and stimulants are administered internally, will be more successful than the barbarous practice of treating such sores with nitric acid, vienna paste, etc.

Buboes, when they form, should be treated as inflamed glands from any other cause or in any other part.

A chancre having been contracted, is there any remedy to prevent secondary syphilis from following, other than the early destruction of the chancre? Formerly, the answer was, yes, give calomel. But "Ichabod, the glory has departed," may be written on every calomel bottle. Now, we have four reasons why mercury should not be given. First, the chancre may not be an infecting one. Secondly. If an infecting one, mercury given hastens the secondary symptoms. Thirdly. Mercury aggravates the secondary symptoms. Fourthly. Mercury has a tendency to prevent the termination of syphilis in resolution with the secondary symptoms, and must necessarily do so, provided enough of the mercury be given.

It is very doubtful whether the destruction of an indurated or constitutional chancre, even as early as its first day's existence, will prevent the infection of the system, and an absolute certainty that there is no medicine at present known, that has the power of preventing constitutional symptoms from following the inoculation of the specific virus into the system for the first time.

Secondary Symptoms—A chloro-anæmic state of the blood, Lassitude, neuralgia or rheumatic pains, glandular enlargement, sore throat, falling out of the hair, eruptive diseases of

the skin, etc., etc. *Symptoms of Mercurialization*—A chloro-anæmic state of the blood, lassitude, neuralgic or rheumatic pains, glandular enlargement, sore throat, falling out of the hair, eruptive diseases of the skin, etc., etc.

Out of a hundred patients with the above symptoms, there would probably be eighty that no one could say from the symptoms, without the history of the case, whether the symptoms were those of syphilis or of mercury.

I can only conceive of two principles upon which any man can administer mercury as a remedy in syphilis. One principle would be, that "like cured like;" the other, that mercury is a revolutionizing agent, and in some mysterious way creates a morbid state of the system, which morbid state is substituted for the morbid state previously existing, and having thus victoriously routed the disease against which it was prescribed, it magnanimously retires from the field of action, leaving the constitution in its original salubrity. I have never seen any other theory of the therapeutical effects of mercury on the system, that would justify its administration as a cure for syphilis. Perhaps those who administer it have some other and more plausible theory. Upon either principle, why change the treatment when tertiary symptoms make their appearance? Why not continue the mercury until the tertiary symptoms disappear?

While there is no medicine that will prevent secondary symptoms, iron should be freely given to the anæmic or scrofulous from the time of the contraction of the chancre, and the quantity increased after the appearance of the secondary symptoms. While in the military service, and since, I have always treated syphilis as a chloro-anæmic disease, applying the same local applications to sore throat, eruptions of the skin, etc., as though they were the result of any other cause.

While a student in Edinburgh, Mr. Syme stated to the class that, for the past ten years, every bad case of tertiary syphilis that he had treated came from over the border, or had been treated by English students, where the Hunterian doctrine (mercury) had taken deep root, or Irish students, where Carmichael's plan of treatment was followed. Though mercury still holds its place in systematic works on syphilis, I was of the opinion that it was being pretty generally abandoned by the profession as a sovereign remedy for syphilis. The number of cases of mercurialization that I have met with during the past few weeks, would give one the idea that mercury is still a popular remedy on this coast for the cure of syphilis.

I have now coming to the San Francisco Dispensary several cases. John O. N., with hemiplegia, who gives the following account of himself: September, 1865, contracted chancre; consulted a physician in this city, who gave mercury three months; for three weeks of the time, had a dreadful bad mouth. January, 1866, took cold, and was seized with his present hemiplegia; never had any eruption on his skin; since took a great deal of iodide of potass, but to no purpose; seems to be improving now—takes ferri pulvis and strychnia. H. O., loss of voice from what seems to be paralysis of the palato-pharyngeous muscles, also partial paralysis of the lower extremities; says that in 1865 contracted chancre; took no medicine, was well for one year, when he had pains in the joints and head, for which pains he was given mercury for 14 weeks; mouth sore most of the time; a few weeks afterwards, was exposed to cold and wet, which left him in his present condition.

Granting that the mercury given in these cases had the effect of preventing secondary symptoms, was the cure not too dearly bought? There are several other similar cases at present being treated at the Dispensary, and in every case the paralysis is evidently due to the mercury that had been given to cure a disease they had never contracted.

HOUR GLASS CONTRACTION OF UTERUS PRECEDING BIRTH OF THE CHILD.

By WM. H. DAVIES, M. D., M. R. C. S. E.

Assistant Surgeon to the California State Woman's Hospital.

Mrs. I———, at 35, was seized with labor pains at 10 P. M. I was summoned soon after, but on examination, finding my services were not immediately required, retired. I was not recalled until 6 P. M., of the following day, when I found the pains severe, regular, and apparently effective. On examination, found the os fully dilated and the head partly resting on the brim of the pelvis, from which position the severe pains, although I waited more than two hours, failed to move it in the least. Knowing that the woman had been thrice successively delivered by forceps, on the last occasion having operated myself, and finding she was becoming somewhat exhausted, by the severity of a long-protracted labor, I determined to apply the long forceps. This I attempted and utterly failed. The head being so movable, not at all engaged in the superior strait, and partly resting on the brim, rendered my efforts vain. I at once attempted turning, and to this end introduced my hand into the uterus, over the head of the child, and as far as the shoulders; but beyond this I could not, either by stratagem or force, proceed. I now administered chloroform fully, and renewed my efforts, but with a similar result. Having summoned another physician, we took counsel, and as he thought it preferable, if possible, to deliver her by forceps, the attempt was made, but like my own, failed. The chloroform was re-administered, and our efforts once more directed to turning, but beyond the shoulders neither of us could force our fingers. Feeling that in the multitude of counselors there is *sometimes* wisdom, a third physician was summoned. He proceeded to turn, but once more we were baffled. Seeing that the patient's strength was rapidly failing, and realizing the importance of speedy delivery, I having placed her fully under chloroform, introduced my hand up to the opposing, (or, more correctly speaking, constricting) portion, at last succeeded in wedging in a finger, then two, and presently my whole hand as far as my wrist, but farther I could not proceed as the uterus so firmly grasped my hand as to render it almost powerless; but after a few minutes, the chloroform having produced partial relaxation, I was enabled to seize the left foot, on which I immediately made traction, and after some time succeeded in bringing it down, feeling as I did so the body of the child gradually being retracted through the constricted portion; and continuing my efforts, brought the foot down to the outlet, the head at the same time freeing itself, and passing into the upper portion of the hour-glass contraction.

Attaching a noose to the foot, I left to my companions the task of completing the delivery, which occupied some time, as the uterus continued to grasp the child, and it required considerable force to deliver it. There was no difficulty in delivering the placenta, and but very slight hæmorrhage; and the woman, after passing through a rather sharp attack of puerperal fever, ultimately made a good recovery. The case is peculiar, from the fact of there being undoubtedly an hour-glass contraction of the uterus, firmly grasping the child below the scapula. This was proved by the fact that when I

succeeded in passing my hand through the constriction, I found it in a free cavity, the uterus not being uniformly contracted around the body of the child; and it was further proved by the deep indentation found on the body of the child after birth, remaining, in fact, for some days. Another uncommon feature in the case was the total failure of the chloroform, for so long a time, to procure any relaxation of the uterine fibers, although used to its fullest extent; and I think a third point of interest is the fact of the hour-glass contraction yielding on the birth of the child, when we would have supposed it to continue as long as the placenta was in utero.

California Medical Gazette.

SAN FRANCISCO, SEPTEMBER, 1868.

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ACCUSATION AND JUSTIFICATION.

Quem mala stultitia, aut quæcunque inscitia veri,
Cæcum agit, insanum Chrysippi porticus, et grex
Autumat.—Horace.

The *Pacific Medical Journal* is very angry with us, because, in our salutatory, without the most remote idea of wounding or giving offense, we mentioned, as one of the reasons why we started the California Medical Gazette—that the *Journal* was not a success, and had never worthily represented the profession on this coast. It seems, we unwittingly touched a very sore place, which made the galled jade wince, and in the next number we are greeted with a tirade of abuse, and an attack so fierce, that one of the daily papers amusingly describes it as an onslaught with a Damascus blade.

Before we reply to what we must consider as a most disingenuous attack, we wish most distinctly to inform our readers, that they shall not in the future be annoyed by any personal matters like the present; for we hold it to be derogatory to the dignity of a professional journal to descend to petty recriminations and bickerings. In our last number we advocated the necessity of cultivating a spirit of professional harmony, and we mean, so far as we are able, to act up to it. We regret that the necessity is forced upon us, but a reply must *for once* be made. We will write in good temper, and the fault shall not be ours, if from this onward we do not dwell with our contemporary in peace and amity. We have already stated in our salutatory, that we hoped the only feeling existing between us would be one of generous and friendly rivalry for the advancement of our common science; but this sentiment seems to have escaped the editors of the *Journal*.

In justification, then, of our statement that "the *Pacific Medical Journal* has never been a success," we now ask, Does a successful journal find it necessary to change its editors nine times during its short existence of ten years? Does it cost a successful journal "thousands of dollars" (the admission of its present conductors) to keep it alive for that period? And, lastly, is this successful journal a paying institution at this moment? We do not think, that any reply or comment is necessary. We therefore take up our other statement, that "the *Pacific Medical Journal* has never worthily represented the profession on this coast." All that we deem necessary to prove the correctness of this statement, is the record of the back numbers of the *Journal*. Looking over a file by our side, we find, under the superintendence of its many editors, sparsely scattered here and there an occasional readable article, communicated by an able pen; but we look in vain for any evidence, that the general profession have taken an interest in it—that they have supported it by their intelligence, or aided it by their co-operation. In what way, then, has this *Journal* represented them? We should indeed be sorry, if our acquirements as a professional body, if our intellectual status, were judged by our brethren abroad by this file of the *Pacific Medical Journal*.

We therefore maintain, that it is not a reflex of medical ability, and that it never has worthily reprerented the profession on this coast.

And this brings us to the attacking part of the onslaught, which begins by saying, that it "*illy*" becomes us to step in and reap a harvest we have not planted, especially as our spelling and syntax are bad, our Latin miserable, and our French execrable; and as, moreover, we are lacking in modesty in daring to breathe aught save praise concerning a journal, that has been edited by a number of persons, some of whom, we admit, are much respected by us. Now, really, it is rather humiliating to be obliged to notice, and answer in a proper spirit, such a . . . . well, we will say, puerile attack as this; one which the *Country Parson*, in one of his admirable papers, calls "vealish." *We* want to reap no harvest but one of our own sowing, and we have a suspicion that winter would be upon us, before we found a crop belonging to the *Journal*, or that, if found, it would not excite any envious feeling. As to our bad spelling, our miserable Latin and our execrable French, these sins are all comprised in one or two typographical errors, which escaped us in the hurry of bringing out our first number. And here we incidentally inform the *Journal*, that this one number contains as much matter as the *Journal* gives to the world in six months.

We are next accused of a want of modesty, in not speaking eulogistically of this many-fathered *Journal*. "Want of modesty" is a very pretty phrase. If the censure be applicable, we share it in common with some of these very fathers. We know some of them

who speak of their offspring in terms certainly not engendered by endearing parental affection. The children of good men do not always turn out well.

The *Journal* then grumbles at us because we have allowed some "new comers" to be our contributors. We restrain ourselves from the temptation of writing in a fine "highfalutin" style on this subject; it is really too trite for platitudes. We will therefore content ourselves by kindly reminding the *Journal*, that our city is fast growing, and is even now large enough for all. We old hands will be the better for a little new blood; we do not know *everything*, and therefore as a selfish policy it is bad to try to *stamp out* the "new comers."

Next we are charged with having culled our selected matter chiefly from British journals. In our first number there certainly was a preponderance from these sources, but it was purely accidental. It so happened, that we found there the material which suited our purpose better than in the periodicals of this country. Restraining any outburst of honest indignation at such a sentiment, we only remark, that we hope Heaven will hereafter have mercy upon us, if ever we can be so bigoted, so narrow-minded, as not to go beyond our own shores for instruction. We are thankful, that science has never *yet* known a country, or its true votaries been influenced by a national or political prejudice.

And lastly comes the crowning guilt—the cowardly audacity—the "anti-American" conduct of hiding our names behind the shield of our publisher. This is the home thrust of the "Damascus blade." The editors of the *Pacific Medical Journal* disingenuously ignore the reason, that we gave for this in our salutatory. We therefore further state, that, instead of the anonyme being used, as insinuated by the *Journal*, as a mask for private purposes and private gain, the names of the editors were withheld solely by the wish of our publisher, who, knowing that the profession in this city was unfortunately too much divided into parties and cliques, thought that a gazette devoted purely to professional objects, would work its own way on its own merits, and if no names appeared, no possible exception could be taken. It seems, however, that these pure motives have not been understood or appreciated.

The editors themselves, wishing to give the profession a magazine devoted solely to their interests, and one which should advocate and advance those of the whole, and not those of a class, concurred in these views; but *personally* they had no objection to the publication of their names, and fearing, since the issue has with some illiberality been raised, that continued reticence will mar the usefulness of the GAZETTE, and give occasion for further inuendoes, they now declare its paternity on the title page.

This, then, is our reply to a long wordy assault made on us, the moment we first appeared. We must confess, that we feel sorry the *Pacific Medical Journal* has assumed a hostile attitude towards us. We felt kindly towards it, and gave it the meed of commendation we thought justly due, in saying it was "brighter and better to-day than at any former period of its existence." We cannot therefore forbear thinking the attack was ungenerous—and, besides, our *amour propre* is wounded at the feebleness of the blow—for, when we are called upon to defend ourselves, we like to have something to justify us in putting on our armor—we like a "foeman worthy of our steel;" and when we expect to meet a hero, we are disappointed if we find only a Philistine.

NOTES OF THE MONTH.

PREVENTION OF PITTING IN SMALL-POX.

Dr. Burton, R. N., who has had very considerable experience in the treatment of small-pox in Haslar Hospital, has mentioned to us a plan for the prevention of pitting, which he assures us perfectly fulfils every indication, and leaves the face of the sufferer free from pit, scar, or seam. The plan is so simple, that we advise our friends to try it, as we assuredly shall ourselves the next opportunity that offers. It consists, then, in painting the face, or that part of it where the pustules appear, before or as soon as maturation commences, with a solution of India rubber in collodion. The solution should be made thin, and painted on lightly the first day, adding daily successive coatings, if it shows any disposition to peel off, or does not sufficiently cover the pustule. Among the many procedures employed to prevent pitting, this may not be an original one, but it is new to us.

DEATH OF DR. JOHN ELLIOTSON.

The telegraph informs us of the death of Dr. John Elliot, of London.

We do not know any Dr. Elliot of sufficient reputation to have the announcement of his death sent across the Atlantic by the cable; we therefore conclude that it must mean Dr. John Elliotson.

Elliotson must have reached a ripe old age, having outlived himself and his justly celebrated name more than thirty years. Before 1840, he was at the zenith of his fame. No man in London was more popular, or had a larger physician's practice than he. No teacher was more eloquent, or had a larger class of

students. He was the author of a meritorious work on the practice of medicine, and he edited and added largely to Blumenbach's Physiology. He was Professor of Medicine at the London University, and Physician to the Hospital attached to that school.

By one act he lost all—his chair at the University, his post at the Hospital, and the confidence of the public—he committed professional suicide by embracing mesmerism. He advocated it in private, and he practised it in public at the Hospital. Wakley, in the *Lancet*, exposed the deceptions of which he was the victim, and by a series of clever experiments laid bare the imposture to the medical world. Still Elliotson was unconvinced, and persisted in his mesmeric seances at the Hospital. The authorities of the University then interfered, and Dr. Elliotson was requested to resign. He took a band of pupils with him; but he sank into obscurity, and he never emerged from it.

SUIT FOR ALLEGED MALPRACTICE.

Suit for damages for alleged malpractice was commenced, some months ago, in the Fourth District Court of this city, against Doctor L. C. Lane. The case came up for trial in the latter part of August, and was witnessed with much interest by a number of medical gentlemen who were present.

The cause of action was in reference to an eye, injured by a fragment of metal over two years ago; the man meanwhile applying to various parties for surgical treatment, without any alleviation, until, some ten months after the injury, he applied to Dr. Lane.

We are pleased to say, that, after a lengthened trial, Judge Sawyer, in reviewing the evidence adduced by the plaintiff, stated that not a particle of evidence had been brought forward by him to show that Dr. Lane had been guilty of malpractice; but, on the contrary, that most of the plaintiff's evidence was altogether favorable to him: and beside, if physicians were to be prosecuted every time they failed to cure their patients, soon the courts would be overrun with such cases.

REVIEWS.

Electro-Physiology and Therapeutics; being a study of the electrical and other physical phenomena of the muscular and other systems during health and disease, including the phenomena of the Electrical Fishes. By Charles Morgan, A.B., M.D. 8 vo., pp. 714. New York: William Wood & Co., 61 Walker street. 1868. For sale by A. Roman & Co., San Francisco.

The author of this profound treatise died soon after the completion of his work, and before it went to press, as we learn from the preface, written by Dr. William A. Hammond, late Surgeon-General of the U. S. Army, who undertook the revisal of the proofs. We have never seen condensed into a single volume such a mass of accurate information upon all the abstruse and difficult subjects treated, as is contained in this. Often a few pages embrace the gist of what has filled a considerable monograph on the same topic; and, so far as our knowledge extends, we must endorse the sweeping praise of the editor, when he says "there is nothing in the English language which at all approaches it as regards the scientific treatment of the whole subject of electricity." The peculiar style, or involved phraseology of the author, we consider a real defect of his work, as it tends to render more obscure matters that are sufficiently perplexing, and consequently repulsive to most minds, when expressed with the greatest perspicuity.

The first two chapters contain a comprehensive summary of magnetism and the correlation of forces. Then the theory and laws of statical electricity are given, with descriptions of apparatus. Here is pictured and explained the marvelous electrical machine of the Berlin Professor, Holtz, which, with its plate of thin glass revolving in free air, and without rubber or prime conductor, those necessary portions of the older machines, but acting solely by induction, can send forth a continuous torrent of scintillations, seven to nine inches in length, as we have ourselves seen. From Chapters IV to XI, the subject of dynamical electricity, so far as relates to the generating, condensing, transferring, measurnig, directing, etc., of the currents, is thoroughly discussed, together with diamagnetism, thermo-electricity, and all the laws and theories of electro-magnetism and the various kinds of induction. Chapter XII gives the method of conducting refined experiments in animal electricity, with description of means for preventing polarization of electrodes, and other sources of error. After this, some fifteen pages are devoted to the consideration of the object of electro-physiology, and to a *resumé* of what is known of electricity in plants and various animal liquids, and of mesmerism.

Those subjects occupy about one-third of the volume; the other two-thirds, except twenty-six pages at the last, given to the therapeutical application of electricity, are filled with a minute account of the most curious, suggestive, and novel experiments, by numerous investigators, in the various branches of electro- and chemico-physiology. A few short extracts will convey a faint idea of the scope of this part of the work. Speaking of Matteucci's experiments in 1838, it says: "Experimenting in this way, he obtained as powerful a current as that produced by Graham's preparation, and *one, too, having the same direction, i. e., upward*, when the feet of the whole, unmutilated, though skinned frog, were dipped into one vessel, and the head or back into the other. This important experiment at once refutes Volta's theory, Nobili's thermo-electric hypothesis, and all idea of any electro-chemical reaction." Again, referring to a similar experiment: "The frog being in the normal or healthy condition, the galvanometer-needle flies at once from zero against the checks, indicating *in the frog a current moving from the feet to the head, i.e., upward, and in the galvanometer from the head to the feet.*" After demonstrating the fact, the following is its statement of the *law of the muscular current:*

"*I.—The Active or Efficient Arrangements.*

"*A.* Every point of the natural or artificial longitudinal section is *strongly positive* to every point of the natural or artificial transverse section of the same muscle.

"*B, a.* Every point of the natural or artificial transverse section is *feebly positive* to any point in the same section situated nearer to the electro-motive centre.

"*b.* Every point of the natural or artificial longitudinal section is *feebly positive* to any point in the same section situated nearer to the electro-motive equator.

"*II.—The Inactive Arrangements.*

"Symmetrically situated points of the natural or artificial transverse section are inactive in reference to one another; and the same thing is true of symmetrically situated points of the natural or *artificial* longitudinal section."

Referring to Bruecke's modification of Bowman's theory of the elementary constitution of the primitive muscular fasciculus, it declares: "Bruecke has shown that the dark transverse bands are formed of *sarcous elements*, and these are constituted by a birefracting (*i.e.*, *anisotropic*) substance, while the clear, or connecting bands, are made up of singly refracting or *isotropic* (from two Greek words, representing *equal*, and *I turn* or *refract*) matter; and that each sarcous element acts like a birefracting, uniaxial, *positive* crystal, having its optical axis always parallel with the longitudinal axis of the fasciculus. Moreover, he asserts that each such sarcous element is really a group of exceedingly minute bodies, called by him, from their powers of birefraction, *disdiaclasts* (from three Greek words, representing *twice*, *through*, and *I break*), and believed to be solid molecules of unchangeable size, form, and optic axis, though all of the disdiaclast groups are not of the same size."

Electrical currents have been demonstrated in the nerves of man, and all the animals submitted to experiment, and the general law governing them has been formulated almost precisely like that for the muscular currents given above. "Experiment also shows that every cross-section of the brain is negative to all points of the external surface; and that every artificial transverse section of the spinal cord is negative to every point of its natural longitudinal section, or to that of the brain; and these currents are quite strong."

In the article on the influence of different agents on the nerve separated from the nervous system, it is observed that "Alcohol, ether, acetic or nitric acid, liq. potassa, concentrated solution of common salt, etc., soon kill the nerve, whereas, curious to say, a concentrated solution of arsenious acid acts very slowly and feebly."

In discussing the question, whether stimulation moves only *centrifugally* in motor nerves, and *centripetally* in the sensitive, and whether the non-appearance of pain when the anterior nerve-root is stimulated, is a proof of this fact in regard to the motor nerve, or the failure of muscular contraction is such proof in regard to sensitive nerves when the posterior root is stimulated, we find the following just observations: "The absence of sensation when only motor nerves are stimulated cannot, however, *per se* disprove in either case the centripetal conduction of stimulation; for the conversion of stimulation into physiological sensation requires a special apparatus at the central end of these fibres, just as motion requires a special apparatus to receive and unite with the peripherical end of the motor fibres; and this explains why it is that the stimulation of the motor nerves can only give rise to motion (*i. e.*, muscular contraction), and that of the sensitive or sensorial nerves to sensation. This is proved by the fact that, on healing together the central stump of the purely motor hypoglossal nerve with the peripherical stump of the purely sensitive lingual nerve in dogs, stimulation of the compound nerve causes both muscular contraction in the appertaining tongue-half, and pain."

In the chapters treating of the cutaneous and muscular currents of the living, uninjured man, it is stated, among much other highly important and interesting matter: "When a kind of human preparation of Galvani is made by deriving the current between the two feet and the breast, we get in the quiet state a strong upward current, giving with the full length of the galvanometer a constant needle deflection of some 60° to 80°. Now, on causing the muscles of both legs to contract, the needle actually moves, and by advancing towards the checks shows an increase in the strength of the already upward current; and if this positive increase of the cutaneous current is really due to a negative variation of the muscular current, then the direction of the latter is downward in the limb, instead of being upward, as in the frog. Of course, the same experiment succeeds when only one leg is used, though the resulting deflection is much feebler." And again, alluding to the same subject: "The success of these experiments depends largely on practice, the state of health or comfort, mental or physical, muscular strength and energy, the conductivity of the epidermis, and the sensibility of the galvanometer."

At the close of the volume, under the head of *Electro-therapy*, the practical application of the facts and principles previously made known to the treatment of diseases, both medical and surgical, is sought to be given; but we are sorry to say we consider this the least valuable portion of the work, and the regretful thought obtrudes itself, that the rich harvest of fact, gathered with such vast labor by the author in the field of physiology, has not been utilized by him to most advantage for therapeutics. If this latter branch of science had received a proportional consideration, we believe the objectionable method of operating practised by Duchenne (de Boulogne) would not have gained so large a space as it now occupies, and the employment by Remak of "fifteen to twenty-five modified elements of Daniel, with fixed or motionless electrodes," would not have been mentioned without condemnation.

The typography of the book is good, the binding neat.

Studies in Pathology and Therapeutics. By Samuel Henry Dickson, M.D., L.L.D., Professor of Practice of Physic in Jefferson College, Philadelphia, etc. William Wood & Co., 61 Walker street, New York. 1867. For sale by A. Roman & Co., San Francisco.

We most heartily recommend this unpretentious little work of Dr. Dickson. It consists of six essays: On the Character and Tendency of Disease; On the Causation of Disease; On Certain Morbid Conditions of the Sensorial System; On Pneumonia; On Scrofulosis and Tuberculosis; and on Therapeutics. Each essay is written in a clear argumentative style; all that is worth knowing in its literature is ably discussed, and deductions are drawn in a truly philosophical spirit. The publishers have not done it justice in issuing it in so unpretending a form—so fine a gem deserves a richer setting.

Vaccination, Revaccination, Inoculation, &c. How to prevent Small-Pox. By S. F. Elliot, M.D., late Health Officer of the Port of San Francisco, and Member of the Board of Health. San Francisco: H. H. Bancroft & Co. 1868. 22 pp.

This is a well-timed and well-written pamphlet, on the subjects mentioned on the title-page. The author states, that his object in publishing is to give the public information about small-pox, and to impress upon them the necessity of vaccination as a sure preventive against this fearful malady. This is so important, that we fully indorse the views advanced by the author.

CURRENT LITERATURE OF THE MONTH.

PRACTICE OF MEDICINE.

THE TREATMENT OF HÆMORRHOIDS.

By J. Mulvany, M.D., L.R.C.S.Ed., etc., Assistant-Surgeon Royal Navy.

Few diseases occasion more distressing sensations than internal hæmorrhoids; few are productive of more corporal debility, or mental disquietude—irksome to the patient, hitherto contumacious to the physician, they have long afforded an arena for the exercise of surgical skill: the number of remedial agents which from time to time have been recommended for their removal, affording at the same time ample evidence of the fecundity of the inventive genius of the faculty, and the intractability of the affection. Blisters, the actual cautery, persulphas, and perchloras, ferri, the knife, the ligature, separately and conjointly, have been warmly extolled. Latterly, to the application of nitric acid, first, I believe, used in Dublin, is unanimously conceded the largest meed of laudation. But however efficacious such an application may be, the nervous, debilitated, chronic sufferers, who form the majority of those seeking surgical aid in those cases, will not submit without repugnance to the employment of so potent an agent. A simplification of the mode of treatment, sans the knife, nitric acid, *et hoc genus omne*, occurred to me, might be suggested by a careful consideration of the anatomy during health, and the pathological condition during varix of that portion of the alimentary canal, which may be termed the hæmorrhoidal region, extending from the anus to a line or two above the internal sphincter. Superiorly, this is lined by mucous membrane, by no means intimately adherent to the subjacent tissue; inferiorly, its character changes and becomes muco-cutaneous; whilst, in the middle third, we find the cutaneous element prolonged into triangular vertical linguettæ, named by Morgagni, the columns of the anus. At their junction, *en bas*, they form a number of valvular folds more or less elevated, with their concavities directed upwards, which are deserving of attention. Next to the mucous membrane is the cellular coat in which the hæmorrhoidal vessels ramify; more externally are the sphincters, next a few pale muscular fibers, prolonged from the longitudinal bands, imagined by Sappey to assist in dilating the anus, and which probably serve by their contraction to assist the movement of the venous blood through the superior hæmorrhoidal vein. Next in order we have the levator ani, and then a soft, yielding adipose cushion filling up the ischiorectal fossa. The vascular supply, derived from the inferior mesenteric, internal iliac, and pudic arteries, is returned by two sets of veins into the systemic and portal systems. By the inferior hæmorrhoidal, the blood collected from the anus and external sphincter, is poured into the internal iliac. This vein differs from the superior in its comparatively short course, and its being provided with valves. The superior hæmorrhoidal, commencing in an intricate network, much more extensive than that of the inferior, situated beneath the semilunar valves of Morgagni, ascends into the abdomen as a tributary of the portal.

Thus we see that this vein is pre-eminently disposed to varix, from a variety of causes, viz.:—its length, rendering it so liable to pressure; its opening into the splenic, almost at right angles behind the pancreas; its blood having to pass through the liver; its being unprovided with valves; the tendency of the Morgagnian festoons to obstruct the passage of hardened fæces and favor their impaction; their relation to the venous plexus, whereby this will probably be dragged down, when prolapsus of the mucous-membrane occurs from the pressure of impacted fæces; straining at stool, etc.; the laxity of the mucous attachment; the yielding walls of the canal and constitution of the muscular planes during defecation, contribute towards the same result.

The immediate causes of hæmorrhoids are such as lessen the *vis a tergo*, or impede the venous current, *a fronte;* the former constituted by general muscular relaxation, and diminished contractility of the hæmorrhoidal arterial coats, as frequently results from residing in the West Indian climate; the latter, by mechanical impedimenta, removable or irremovable. Of the removable, constipation is by far the most frequently exciting cause, for, when habitual, the muscular walls of the rectum gradually lose their tone and sensibility, and become more or less paralyzed by the excentric pressure of the contained fæces, dilatation succeeds, and the ascending column of blood from the rectum thus pressed on, suffers retardation, is thrown back on the hæmorrhoidal plexus, and varix ensues.

In warm climates, in consequence of the rarefaction of the atmosphere, the liver is called into increased activity, to supplement the lungs, and the blood is depurated by the increased elimination of its biliary elements. Thus a tendency to relaxation of the bowels, or diarrhœas, exists at the same time; owing to the debilitating effects of caloric, relaxation of the muscular tunic of the hæmorrhoidal arteries takes place with partial paresis of their vasomotor nerves, as may be inferred from the dilated condition of the corresponding capillaries; hence an unusual afflux of blood to the anal region takes place, which, if further augmented by hepatic torpor, or by the constriction of the muscular planes surrounding the gut during a violent diarrhœa, such as is likely to occur in the crisis of a bilious remittent, cannot be directly propelled by the weakened heart through the portal system, and if not finding a ready outlet through the systemic veins, will, necessarily, press with increased gravitic force on the hæmorrhoidal venous plexus and capillaries, and these yielding become varicose, and pushing before them the lax mucous-membrane and Morgagnian structures, descend as a hæmorrhoidal tumor into the bowel, where, exciting spasmodic contraction of the sphincter, and inducing irritation of the bladder, it becomes the head and front of a series of uneasy sensations, which render defecation a martrydom, produce constipation, and thereby *emperran el mal.*

For a somewhat similar reason the disease is frequently met with amongst stokers, the heat of the fire producing muscular relaxation, and their stooping and holding the breath, with the diaphragm consequently fixed, during the act of shoveling, increasing the amount of blood in the abdominal veins.

The internal pile, so produced, is broad and vascular, has a tendency to abrasion, bleeding and inflammation. It may be regarded as the true internal pile, the change of shape, consistency, appearance, or character which it is apt to undergo being the effects of subsequent inflammation and effusion of lymph or blood; it differs from the external in being composed of capillaries, veins, and relaxed Morgagnian columns, in denoting a greater amount of embarrassment in the hæmorrhoidal circulation, and in the external, as well as what has been called the intermediate pile, being the result of a minor degree of retardation from pressure, or causes purely local, such as heat, cold, irritation from various sources, etc.

For the purpose of treatment, hæmorrhoids may be classed under three heads—1st, those requiring constitutional treatment alone; 2nd, those for which topical applications suffice; and, 3rd, those for which a combination of topical and constitutional remedies are requisite. Under the first head come the true internal pile, and that in which the capillary element

is less prominent. Under the second are the external and intermediate piles, whilst the third embraces the cellular, erectile, fleshy, warty, &c., internal piles.

The rationale of treatment is extremely simple, and consists in the adaptation of remedial agents to correct the pathological conditions on which they depend—in other words, to remove constipation, restore peristaltic action, give tone to the paralyzed muscular tissue of the great intestine, constringe the dilated hæmorrhoidal capillaries by increasing the contractility of the middle coats of their supplying arteries, and thus enable the veins to resume their normal degree of rectitude.

In belladonna we possess an agent capable of supplying by its physiological action all these desiderata. Because, acting through the intestinal branches of the solar plexus, it will increase peristaltic action, and restore tone to the paralysed muscular fibers of the colon and rectum, by which means the bowel may be unloaded and kept in a state of solution, and pressure be thus taken off the hæmorrhoidal plexus and semicircular festoons, a desideratum which may be much accelerated by the previous administration of a dose of castor oil, to clear out the bowel and facilitate absorption.

Again, by acting on the vasomotor nerves of the hæmorrhoidal arteries, it will promote the contractility of their muscular tunics, lessen the supply of blood to the trajet-anal, and thereby check bleeding, and, at the same time, diminish the size of, and ultimately remove, hæmorrhoidal tumors of the first class.

On these data, I was led to the employment of belladonna in those cases 18 months ago, and have every reason to be satisfied with it. In November, 1866, a relative of mine, Mr. M——, came under my care for bleeding internal piles of two years' duration, brought on by residence in the tropics, and a severe diarrhœa. The hæmorrhoid was large, vascular, very hot, protruded, and bled during defecation; gave rise to much vesical irritation; a constant feeling of fulness in the rectum; constipation; frequent desire to go to stool; much mental uneasiness; emaciation and general debility. His sufferings were great, so great that they finally overcame a constitutional aversion which he entertained against all surgical operations; and he submitted to have anything done to give him relief. Having once induced an epileptiform fit in a much stronger patient by touching his chancre with nitric acid, I determined to reserve this as a *dernier ressort*, and having cleared out his bowels with a dose of castor oil, I prescribed the fluid extract of belladonna for him in suitable doses every four hours, and ordered a lavement of cold water, *bis die*. In two days the bleeding had quite ceased, and in ten days the hæmorrhoid had entirely disappeared, and has not returned since, though the laxity of mucous-membrane still continues, and causes it to prolapse slightly at stool.

To give a number of similar cases with like results would be a useless repetition. I may, however mention that I have used it with perfect success in the case of a lady eight and a-half months pregnant; believing that the gravid uterus acted indirectly by pressure on the fæcal tract, rather than on the veins, and the consequent accumulation of fæces was the obstructing power to the free return of the venous blood, and knowing that belladonna is extensively used in America during the last days of gestation for dilating the os uteri, I, as she was then suffering a good deal from the bleeding internal pile, put her on two minim doses of the fluid ext. belladonna, *ter die*. A cure was effected in less than a week. I, however, continued the belladonna to the period of her accouchement, and I certainly think it facilitated her labor.

For the external pile, the grease which runs from the hot bearings and eccentrics of the engine-room of a steamer when under steam, will be found an unfailing remedy. Chemically considered, it is rather complex in composition, and may be presumed to be a combination of the fatty acids and oil, used as lubricating materials, with the oxides of the more oxidizable metals exposed to friction. By the bearings are meant the fixtures in which the shaft works. They are made of brass, and lined to a certain extent with a patent metal, composed of copper, tin and antimony, or of zinc, lead, antimony and platinum. The shaft is formed of wrought iron, and the brass is composed of copper, zinc and tin. The bulk, however, of the metals oxidized, judging from a rough analysis I made, is formed of the copper and lead. There was hardly a trace of zinc, and none at all of the others found in a drachm of the ointment.

As the liquified grease drips from the bearings, it is caught in a "save-all," and on cooling is fit for use. It should be mixed with one-eighth its bulk of lard. It then forms an ointment of a pale blue colour, the efficacy of which is so well known to the stokers that they treat, *sub rosa*, nearly all the cases of piles that occur on board ship. A chief stoker of my acquaintance told me that he had treated successfully over fifty patients. He used it indiscriminately for all kinds of piles. From my own experience, I can only vouch for its utility in cases of the external or intermediate varieties; but lately I treated a stoker with it whose anus was festooned with mariscœ, without putting him on the list or getting him excused from duty. He was rid of his garnitures in about a fortnight. It proved equally efficacious in the case of a jockey from the United States, who suffered from the internal, fleshy, and external piles during a number of years, and who had to resign his occupation in consequence. It is needless to say this man had numberless remedies recommended, but *cui bono?* His occupation was gone, and could not be pursued until the ointment gave their *congé* to his unwelcome guests.

For the varieties of internal hæmorrhoids which come under the third heading, the castor-oil and belladonna, administered by the mouth, and the ointment applied locally, will usually suffice. How the ointment acts I can only conjecture, but can recommend it with confidence as safe, efficacious, and productive of but very little pain. It will, I think, be generally found that if nature dispenses afflictions to the human race with her left hand, she showers their panacea on us with her right; and if she sends sickness and disease in our midst, she also places their remedies within our reach, and leaves us to find them. To the Bolivians, for their various calenturas, she has given the Calisaya. If the bothriocephali find a commodious habitat in the dura ilia of the vassals of Theodorus, or perhaps in those of his sable majesty himself, has not nature drawn up a process of ejectment in the flowers of the Brayera Anthelmintica, which will not endanger the life of a bailiff to serve?

Do not the natives of the West Coast of Africa, when suffering from dysentery, find its specific in the fruit of the banana, prepared *secundum artem*, and found growing in the greatest profusion? and could she be less bountiful to stokers? No; if she permits the heat of the stokehold to festoon the anus of the stoker, she also prepares in an impromptu laboratory, in which the shaft and bearings, converted into a pestle and mortar, rub up the lubricating materials, and by means of heat, friction, and the atmosphere, produce an unguent calculated to remove his questionable decorations—one which, to use the language of an enthusiastic stoker whom it recently quit of such appendages, "is worth its weight in gold!"—*Medical Press and Circular.*

HOW TO PREVENT PITTING OF THE FACE BY SMALL-POX IN PERSONS UNPROTECTED BY VACCINATION.

After earnest consideration of the question as to the best means to be adopted to prevent pitting, after reviewing the different applications which have been recommended for that purpose, Dr. Black determined, from his knowledge of the influence of light on the growth and development of both plants and animals, and of the destructive action of oxygen on diseased tissues, to exclude both these agents from the face of a patient that came under his care a short time since. He, therefore, shut out the light from her apartment by additional blinds of a dark color to the windows, and he guarded the face from the action of oxygen by keeping it constantly covered with fresh hog's lard. So effectually was the daylight excluded, that the light of a candle had to be employed when anything important was required to be done in the room. During this time ventilation was strictly attended to. The disease ran the ordinary course, and when dessication, which was rapid, had been completed, he had the satisfaction of seeing that no pitting of the face had occurred.

In Dr. Black's second case, the eruption was confluent on the face, and semi-confluent on the body. The mucous membrane of the mouth and nostrils were similarly affected. From the first moment of the appearance of the eruption until dessication was partly completed, the patient was kept in *perfect darkness*, with the face constantly besmeared with lard. As soon as the pustules had acuminated, they did not, as usual, burst; but they shriveled, as it were, at once into yellowish-brown scabs, which fell off in two or three days, leaving the face *without a single pit*. No secondary fever occurred.

Dr. Black's third case of unprotected small-pox occurred in a female child of one of the families above named. She was six years old, of delicate constitution, weak and puny in development, and on her mother's side, hereditarily predisposed to pulmonary consumption. The attack was severe from the outset; the eruption confluent on the face and mucous surface of the mouth, and confluent to a great extent over the body. Dr. Black endeavored to impress upon the minds of the parents the absolute necessity of keeping the patient in *perfect darkness*, and the face well smeared with lard. To these particulars they themselves attended; but not unfrequently a servant was placed for a time in charge of the sick-room, and whenever such was the case the blind of one of the windows, which was close to the bed of the patient, was invariably half drawn up, so that a certain quantity of light fell directly upon the patient. In vain did Dr. Black forbid this, for so surely as the maid took charge of the patient as certainly did she pull up the window-blind, probably more for her own convenience than the gratification of the child. The case progressed favorably; no secondary fever followed; convalescence was soon established; and after dessication had been completed, there was left on the face a *few shallow pits*, which could be seen only on close inspection.

Very shortly after the recovery of this case, a little brother, seven years old, sickened, passed through a very severe initiatory stage, and had a confluent eruption. He, too, had not been vaccinated. Warned by the previous case, the room was in this instance kept perfectly dark, from the appearance of the eruption until dessication had in a great measure been completed. Although the face was so covered by the eruption that a free space, however small, could not be found; although the face and head were greatly swollen, and the eyes closed for several days; and notwithstanding that the mucous surface of the mouth, throat and nostrils suffered in like manner, yet in this, as in the second case, as soon as the pustules had acuminated, they shriveled at once into scabs, which quickly fell off, and left the face *without a single pit*. In this case, too, no secondary fever occurred.

Before this boy had left his bed, a sister, four years old, and a brother, three years old, were attacked. They were also unprotected by vaccination. The symptoms in both were severe; but especially so in the boy, in whom the eruption was more confluent than in any case which Dr. Black has yet seen during the present epidemic. The face was one mass of eruption, and, in the vesicular state, so coherent were the vesicles on the side of the nose, that they formed large blisters. Such, too, were the conditions of the soles of the feet, whilst the surface of the rest of the body was so occupied by the eruption that a free space could scarcely be found. The eruption of the face of the girl was semi-confluent, but distinct on the remainder of the body. Both patients occupied separate beds in the same room, which was kept perfectly dark during the necessary period. Lard was freely applied to the faces of both, but especially to that of the boy, who during the rising of the pock, frequently rubbed his face with his hands. Dr. Black was afraid that this interference would produce pitting; but such was not the case. Both patients made an uninterrupted recovery; there was no secondary fever, and not the slightest pitting of either countenance occurred.—*Lancet.*

SOME PRACTICAL REMARKS ON BROMIDE OF POTASSIUM.

By Dr. MacGowan.

Medicine, as a profession, is exceedingly conservative in its views, and it is seldom that its members indulge in anything but the most nauseously fulsome remarks concerning its gigantic strides.

Medical men, as a rule, are never tired of blowing the trumpet in honor of the science and the talents of their order; and it is only at the bedside, it is only when we test our art in the crucible of actual experiment upon the plague-stricken mortals that we are summoned to attend, that we feel how blatant, how ridiculous, how impotent, is our vaunted skill, how ludicrous the accumulated wisdom of our greatest medical apostles.

The public judge us by "results," not by the "science" in our books.

They think justly that any science with which we stuff our medical brains, is but a sorry mistress and a poor study, that can give us no new means, no new thought—that can act as no guide, as no finger-post toward the cure of our patients' diseases.

It cannot be denied that the science of therapeutics has hitherto been most excruciatingly unfashionable.

To smell of drugs would perhaps be the greatest degradation an "eminent" physician could endure; and I have myself met with a learned pundit, who as a teacher of Materia Medica at a medical school, boasted that he never troubled himself with the drugs, but got the porter to hand them round for the benefit of his class.

We groan, as a profession, about the inroads of quackery, and not a few orthodox practitioners could be found who would willingly vote for the immediate crucifixion of all homœopaths. We must, however, acknowledge, that much as we may sniff the air at the bare mention of homœopathy, we cannot deny that the homœopaths have acted as spurs to orthodoxy, and have assisted to turn the attention of the profession to the action of drugs upon the living body.

Their two dogmas may be utter twaddle, but the fact remains the same, that as a body of people they have been most

energetic in attempting to discover the action of medicines upon the human frame, and if they could only be induced to throw off the blinkers (viz., *Similia similibus curantur*, and the power of infinitessimals) that Hahnemann has placed upon them, one might have some hopes of their returning into the body of the profession, instead of their remaining in the professional shade of sectarianism.

Homœopaths call themselves "reformers," and pride themselves upon their catholicity and tolerance, yet I have actually seen in a recent work by an otherwise clever homœopath ("Hughes' Pharmacodynamics") that owing to Bromide of Potassium not appearing to come within the two divine laws of Hahnemann, he could not bring himself to use it in the cure of epilepsy! !

It is amusing to find that "authority" acts upon sectarianism as well as upon orthodoxy, and that none of us in the medical profession seem to understand liberty of thought and opinion, untrammeled by the effete dogmas of a bygone age.

I am of opinion that medical men should imitate the bee. This useful insect draws its honey from many flowers; it does not stick to any particular botanical clique of plants, but sips the sweets from every flower.

Every honest general practitioner, who wishes to benefit his patient, and who wishes to give the "*quid*" of sound advice for the financial "*quo*" of his client, should forget all "pathies," and seek from all systems any latent good.

A disciple of Inman, of Chambers, of Billing, and of Hughes Bennett, I seek everywhere for new medical food, for new ideas, and new thoughts. If anything in the way of a practical wrinkle were to be gleaned for the cure of disease, or for the alleviation of human suffering, from an old apple woman of Clare Market, I would not scruple to adopt it.

I would listen to a Zulu Kaffir, to a Red Indian, or to an itinerant quack, for I consider that medicine still stands on the threshold, and has by no means penetrated the "Asian Mystery," or stood in the Holy of Holies of Hygeia's Temple.

For thousands of years the sea has washed the feet of mother earth, holding within her moving billows a material that is now known to be a specific for that *opprobrium* of medicine—epilepsy.

Numerous as have been the ponderous tomes that learned *medicos* have written, yet until a recent period epilepsy was incurable, scarcely alleviable, in spite of learned theories and solid medical jargon.

The medical books were so knowing as to symptoms and their causes, yet withal, so impotent, so imbecile in treatment.

No one reading in the *British Pharmacopœia* the following, would think much lay concealed:

"Bromum. (Bromine.)
A liquid non-metallic element, obtained from sea-water, and from some saline springs."

Nor would much be gleaned from the following:

Potassu Bromidum. (Bromide of Potassium, K. Br.),
May be obtained by the following process:
Take of Solution of Potash..... .2 Pints.
" Bromine.....4 Fluid Ounces, or a suff.
" Wood Charcoal, fine powder, 2 Ounces.
" Boiling Distilled Water....1½ Pint.

Put the solution of potash into a glass or porcelain vessel, and add the bromine in successive portions, with constant agitation, until the mixture has acquired a permanent brown tint. Evaporate to dryness, reduce the residue to a fine powder, and mix this intimately with the charcoal. Throw the mixture, in small quantities at a time, into a red-hot iron crucible, and when the whole has been brought into a state of fusion, remove the crucible from the fire and pour out its contents. When the fused mass has cooled, dissolve it in the water, filter the solution through paper and set it aside to crystalize. Drain the crystals, and dry them with a gentle heat. More crystals may be obtained by evaporating the mother liquor, and cooling. The salt should be kept in a stoppered bottle.

Yet in Bromide of Potassium we have a specific against epilepsy, an astonishing nervine, a power that we cannot explain, yet withal so potent as to equal an enchanter's rod.

It is the simple truth to say that Bromide of Potassium has brought comfort into many a household, and has well repaid the doctors who have used it, both in fame and purse.—*Medical Mirror, June*, 1868.

MIDWIFERY.

DYSMENORRHŒA.

By R. E. Bland, M.D.

I made some remarks a few weeks ago on the connection of the rheumatic diathesis with some forms of dysmenorrhœa. My remarks grew out of what Dr. M. M. Pallen said in regard to the effects of the black cohosh (*cimcifuga racemosa*) in the removal of the distressing pains of a case of dysmenorrhœa under his care.

The medicine was given in the form of tincture in the dose of a teaspoonful several times a day, and the pain and distress very rapidly subsided, and soon disappeared. The Doctor attributed its very favorable effects to its powers in the removal of the rheumatic diathesis, the case under consideration being one, perhaps, of rheumato-uterine dysmenorrhœa.

My mind had been directed to this view of the subject some years ago by the publication of Dr. Higginbottom, of England, after which my own observation led me to give more careful attention to the rheumato-dysmenorrhœal character of very many of these cases. When Dr. Pallan introduced the subject to the Society, as stated above, I gave it as *my opinion* that many of these cases of dysmenorrhœa are rheumatic, perhaps eight-tenths. It is simply my intention to direct the minds of the profession to the supposed connection of these distressing and perplexing forms of dysmenorrhœa with the rheumatic diathesis.

Many years ago Doctors Higginbottom, Gooch, Rigby, together with other distinguished names, elicited medical attention to this rheumato-uterine state. In the course of my clinical observations I have noted many facts in this connection. The uterus is a muscular organ, possessed of its longitudinal and circular fibres. We all know that rheumatism is a disease of the muscular and tendinous expansions of the body, and that when these are the subjects of rheumatic inflammation, the slightest motion of the body or contraction of the muscles causes, sometimes, intense anguish. This being the case in the tendons and muscles of the body suffering from rheumatism, may not the uterus, an organ composed almost entirely of muscles and condensed cellular-tissue, be drawn into the same intolerable anguish by the same rheumatic inflammation. Why should we conclude that rheumatism may cause all parts of the muscular and tendinous system to suffer thus, while the uterus, a great hollow muscle, with fibres disposed in every direction, is exempt from all such influences?

I have often observed a parallel in the action of rheumatic inflammation upon the muscular and tendinous expansions, and the agony that is experienced in that most singular and painful affection denominated dysmenorrhœa. The motion of a muscle affected by rheumatic inflammation causes most insufferable pain. So, when the uterus is thrown into abnormal action by the peculiar state set up at the menstrual period, who can say the signs of active congestion, recognized

in the redness of tissue, the enlargement of the cervix and os tincæ, the tearing agony of the uterine contraction, and the expulsion of the membranous exudations, are not the result of the rheumatic diathesis?

The parallel is also to be seen in the fact that rheumatism is periodical, pursuing its course with great distress and pain to the patient, then suddenly vanishing, leaving but little if any trace behind; so with dysmenorrhœa, especially of the inflammatory type, it makes its advent suddenly, runs its course with great infliction of pain, then as suddenly subsides, leaving the patient comparatively comfortable.

The parallel holds good in another aspect. Rheumatism frequently makes its attacks, and the patient suffers greatly, when the signs of inflammation are absent; there is no swelling, no redness, all the patient knows of the disease is the pain she suffers. It is so with some of the forms of dysmenorrhœa; the action may be violent, the pseudo-membranous exudations may be thrown off, and yet the patient is apparently well in the interval, and, so far as the speculum reveals the facts, the signs of inflammation are absent. In either case the disease may be justly termed neuralgic rheumatism, or neuralgic dysmenorrhœa.

In most of the cases of dysmenorrhœa that have come under my observation, the parts being brought into the field of vision by the use of the speculum vaginæ, have been of the inflammatory type. This was to be told in the violence of the symptoms, by the engorgement and redness of the cervix and os tincæ, by the force and excitement of muscular action, by the expulsion of membranous exudations, and by the tenderness upon touch.

The rheumatic forms of the disease may be distinguished from those that are not by an enlargement and hardness of the cervix and os tincæ. The cases just mentioned are to be distinguished from those that are the opposite in pathological aspect. In the latter, the os tincæ is soft, sponge-like, and when the finger is applied, it appears to come against a soft and elastic substance.

These cases are not rheumatic, as may be known in the constitutional conditions to be observed in each. In the former are the signs of active inflammation. The speculum reveals redness, enlargement and hardness, with tenderness of the cervix and os. The latter, on the contrary, presents the signs of anemia; face and surface of the body pale, general languor, no tenderness, or but little, either in the exploration of the vagina or the neck and mouth of the womb, and the vascular action, instead of strength, exhibits signs of debility, the only resemblance being distressing pain, and, at times, great anguish during the menstrual flow. The latter is the result of inflammation, but of a character to soften and render sponge-like the cervix and os tincæ. Why these cases are attended with great pain I am at a loss to know, but of the fact I am certain. I have never regarded these cases as connected with the rheumatic diathesis; but taking all the facts in connection with the cases of dysmenorrhœa, attended by high inflammatory action, enlarged and tender cervix and os, and these taken in connection with the known imprudence in dress, and otherwise, of young girls, and, indeed, of those more advanced in years, and we may very rationally and safely keep our eye upon the rheumatic complication.

Either of the classes or cases described must be separated from another class, which, in violence and strong vascular action, and great anguish, very greatly resembles the first or inflammatory, or rheumatic variety, as well as the second, or anæmic. Its cause is entirely different from either. It is not dependent upon inflammation, but upon purely mechanical obstructions; upon malformation, malposition, contracted meatus, etc. These cases are to be relieved only by artificial or surgical means; the sponge tent, the knife, surgical manipulation, to restore the organ to normal position, etc.

So far as my own observation has gone, and the results of treatment been seen, I am sustained, most satisfactorily to myself, in the opinion that active inflammatory dysmenorrhœa, of the first class described, is based upon a rheumatic diathesis; that, perhaps, eight-tenths of the cases of dysmenorrhœa belong to this class, and are rheumatic. So far as my own treatment is concerned, especially as adapted to these inflammatory cases, it has been anti-rheumatic in character and most satisfactory in its results. After the bowels have been sufficiently purged, the inflamed, enlarged and red cervix and os tincæ relieved by leeching or cooling washes, by quiet recumbent position and low diet, I have pursued a constitutional treatment based upon the rheumatic idea.

I have resorted to the use of colchicum in its various forms and combinations—the root of colchicum, the vinous tincture, the acetated extract of colchicum. These I have combined with the preparations of potassa—the iodide, the acetate, the citrate and the bromide. I have used all these combinations with the colchicum, particularly the vinous tincture from the seeds, and the acetated extract of colchicum. These remedies, and their vinous combinations, I have used with very great advantage in the rheumatic forms of dysmenorrhœa, or rather in what I supposed to be such.

The following may be used with great advantage in the acute or inflammatory form of this distressing disease:

R——Acet. colchici extr.....dr. i
Acet. pot.....
Iodide pot. *aa*.....dr. ii
Vin. colchici (sem).....oz. j
Liquor opii sed.....gtts. xl

Take twenty drops every three hours to reduce pain; as soon as pain is relieved, then twenty drops three times a day, to be dropped and resumed as soon as the constitutional effects are more or less seen. Or, when other tried remedies fail, the following may be resorted to with good effects:

R——Pulv. gum. camph.....dr. i
Pulv. Doveri.....
Sulph. quin. *aa*.....dr. i
Rad colchici.....dr. ss

M—Ft. massa; divide into pills, No. 60; take one every three hours, until the constitutional effects of the colchicum are felt, then protract the intervals as circumstances may demand.

I would respectfully ask my medical brethren to devote some attention to this rheumatic idea in the treatment of this very singular uterine disease.—*St. Louis Med. Rep.*, July 15, 1867.

A FEW THOUGHTS RESPECTING THE TREATMENT OF THE AFTER-BIRTH.

By W. Canniff, M.D., M.R.C.S., England.

The function of the placenta is well understood. It is at once a bond of union between the new being within the womb and the mother, and the organ by which the offspring's blood is aerated and its growth and development sustained. The hour of utero-gestation, at which the placenta begins its duty, may be doubtful; but the moment when it ceases its work is sufficiently certain.

The onset of parturition at once affects the placental circulation; for, as each pain comes and the uterus contracts, there must be a correlative arrest of the flow of blood into the maternal portion of the placenta. The only effect upon the child is such as may be experienced by holding the breath for

a certain length of time. As the passage of the child by the natural way into the world progresses, the effect upon the child must be correspondingly increased; not only because of the increasingly intensified and prolonged bearing-down pains, but the necessarily increased contraction of the womb as its contents are expelled, and a diminution of the cavity takes place. At last, when the expulsive power overcomes all obstacles, and the head of the child or any portion of equal dimensions is born, there must attend more or less displacement of the placenta in its attachment to the uterine walls. The placenta cannot contract, while the uterus in the whole of its extent does, and this, it is submitted, necessitates a partial or complete separation at this time of the placental organ. The child, during this last pain, has been, as during the previous ones, deprived of the vivifying influence of the maternal blood; but does it now, after this pain, by which the head is born, is over, recover the vital stimulus? If the placenta remains attached it might, indeed it would. But what says experience? The writer speaks only for himself. He has noticed invariably that the child—shortly after the head is born, when there should be, if the placenta remained attached, a return of maternal blood—makes an effort to breathe; there is a gasping. As the chest is confined within the pelvic cavity, the lungs cannot expand; if a long period elapses before another pain completes the birth, the child becomes asphyxiated, and may even die, at least render artificial respiration necessary to bring on the natural. So far, it is supposed, all has been done by the normal powers of nature, although if interference or assistance has been necessary, the subsequent steps will be the same.

When the child is completely expelled, it is submitted that the final expulsive effort of the uterus has entirely detached the placenta, unless there should be abnormal adhesions, and even then it is not of sufficient extent to allow a maternal flow of blood for the child. In other words, it seems most likely that when the head is born there is such a separation of the placenta from the uterus, that the child no longer can derive sustenance from that source, and consequently seeks it in another way, as is evidenced by its gasping; and that when the child is entirely born, there is undoubtedly a complete severance, unless there be abnormal attachment which will require unusual interference to overcome, yet which cannot afford a channel by which the mother can continue to maintain life in the offspring. The child is born, and henceforth must seek the breath and food of life in another way—through other channels. Such being the case, we can see the utter futility of the accoucher waiting a moment before severing the funis. The mistake of feeling the cord, to see if there be fœtal circulation, is palpable, for although blood may be felt passing from the child to the placenta, it does not from that action receive any benefit—acquire any change. It is obvious, then, that the cord may be divided without delay, and moreover, when the child is asphyxiated, the sooner this is done the better—the greater the chance of resuscitating the child by artificial respiration. The proper course is, not to wait until the child breathes, but to hasten the application of the ligature and division of the funis, that the child may be placed in the most favorable position and circumstances to produce animation.

The child is separated from the placenta, and is properly breathing; what remains to be done? Will the medical attendant apply a bandage and wait for a pain to expel the placenta, be the time long or short? Why should he wait? For five years the writer has been accustomed not to wait, but to proceed to assist nature in its removal, in the following manner: The time occupied in tying the cord and disposing of the child is generally about the same period as the intervals between the previous pains, and nature is found quite prepared to obey the solicitations of the attendant and expel the after-birth, which in the majority of cases lies within the vagina. Taking hold of the funis with the right hand, the left is placed over the fundus of the uterus, and through the abdominal walls gentle manipulation is made, at the same time a moderate degree of traction is used in the proper direction upon the cord. According to my own experience, the uterus responds to this action, and the placenta comes away; and when such is not the case, it is found that some unnatural adhesions retain it. In all cases where the placenta does not come, I unhesitatingly introduce the hand and remove it. The dilated state of the parts, and the prepared condition of the hand, are most favorable for this procedure. But, says one, "meddlesome midwifery is bad," and so it is in so far as nature is thereby embarrassed or hindered. Is it, however, a meddlesome thing to tie the cord after the child is born? Certainly not, nor is it to remove the placenta, which now, a foreign body, only prevents the comfortable settling of the mother, whose jaded frame and excited mind so much require the absolute rest which only comes when all is over. It must be borne in mind that in the great majority of cases the placenta comes away by gentle traction and abdominal manipulation, and when it does not, there exists abnormal adhesions, rendering the introduction of the hand necessary; for it is taken for granted that no one would think of administering ergot to produce pains to expel the after-birth. And if manual interference is necessary, there can be no doubt that the sooner it be made the better. The argument that may be advanced, that it is better to wait until the woman can rest before disturbing her, it is ventured, is unsound. After great agony attending the birth of the child, the removal of the after-birth is but a small thing, unless some time has elapsed, so that the stretched and benumbed parts have had time to recover their sensibility.

And still more, the opinion is advanced, that this procedure secures a more thorough contraction of the uterus, so as to prevent *post-mortem* hæmorrhage, and also to prevent the formation of numerous clots, the expulsion of which causes the distressing after-pains.

Reference has not been made to the use of chloroform. It is the writer's custom to always carry with him chloroform when called to attend a case of midwifery, to be given if desired by the patient, and the number desirous of having it is steadily increasing, notwithstanding the influence used against it by a few old practitioners, whose prejudice or something else will not permit them to countenance its use. Of course, the amount of chloroform taken is never sufficient to keep the patient insensible, but to limit the severity of the pain, to take away the acuteness of the sting. Generally, when the last pain comes, a larger quantity is allowed; and at this period the patient is generally clamorous for more; so when the child has been given to the nurse or placed at the foot of the bed, the patient is still under the influence of the anæsthetic agent. And so the steps above recommended, may all be taken ere the mother regain her senses, to know in joy that her child is born.

Belleville, Ontario, Canada, February, 1868.—*Canada Medical Journal.*

SURGERY.

TUMORS TREATED BY ELECTROLYSIS.

By Julius Althaus, M.D., M.R.C.P., etc., Physician to the London Infirmary for Epilepsy and Paralysis.

The entire number of cases I have up to the present time treated by electrolysis amounts to sixty-three; amongst these

there were fifty-two non-malignant, and eleven of the malignant kind.

The total result of the treatment of fifty-three cases of non-malignant tumors is, thirty-two cured, fourteen improved, and in six no result, or, if there was any result it is not known; that is, expressed in percentage, sixty-two per cent. were cured, twenty-six improved, and in twelve there was no result, or result unknown. Almost all the unsuccessful cases occurred in the commencement of my electrolytic practice, when the method of procedure had not been so well developed as it is now.

In *malignant diseases* the results of the treatment are, as might be expected, far less favorable. Whenever the cancer is one of considerable size, and growing rapidly, relief may be obtained, and the further growth of the tumor may to a certain extent be checked, by electrolysis, but I have not hitherto obtained a cure of such patients. In two cases of scirrhus of the breast, where the tumor was only of the size, in one of a nut, and in the other of a nutmeg, the swelling has entirely disappeared. For the healing of an open cancer, the treatment seems to answer well: but I must say that in no case of malignant disease have I ever trusted to electrolysis alone, but have prescribed powerful remedies to be taken internally, for thoroughly modifying the constitution of the patient. Perhaps in course of time a mode of more continuous application of the electrolytic process may be discovered, by means of which we may be able to starve out even malignant tumors with more success than has hitherto been obtained. The facts that the peculiar lancinating pains of cancer generally disappear soon after the commencement of the treatment, and that, even in rapidly growing cancers the growth is often checked by it, seem to show that, by steadily working in the same direction, a remedial agent so powerful as that of electrolysis may yet be found to be instrumental in overcoming the local manifestations of this terrible disease.

The length of time necessary for dispersing tumors varies according to the nature of each individual case. The length of each application varies from a few minutes to a half an hour or even an hour.

The safety of the treatment, which is its chief characteristic feature, seems to me in a great measure due to the fact of its belonging to the domain of subcutaneous surgery; for, although there is a certain amount of action on the skin, yet by far the greatest effect is produced in the interior of the tumor, owing to the superior electric conductivity of the soft and warm internal structures, and also owing to the fact that the electrolytic effect is, under any circumstances, greatest on the points of the needles. Moreover, the eschars produced by prolonged applications are generally perfectly dry, and the skin below them is quickly regenerated, unless this should be prevented by complications, such as external injury.—*Medical Times and Gazette.*

REDUCTION OF DISLOCATION OF FEMUR INTO THE ISCHIATIC NOTCH, BY MANIPULATION.

By George W. Callender, F.R.C.S., etc.

There is one very evident obstacle to the reduction of this class of dislocations to which attention may be directed, as it seems to give the only fair explanation of the difficulties which are experienced in the treatment by extension as well as by manipulation. When the head of the bone lying on the ischiatic notch is pulled forward by extension, it is drawn over the convex outer surface of the acetabulum; but instead of passing towards the socket, it happens, from the formation of this part of the pelvis, that it can follow an easier route which is open to it. From the lower part of the great sciatic notch, a broad, smooth, pulley-like surface leads to, and then curves around, the inferior border of the acetabulum, and thence ascends towards the obturator foramen. The obturator internus above, and the great sciatic nerve, and the upper border of the obturator externus below, rest within it; but between these the groove is covered with fat, and from its surface fibers of the capsular ligament take their origin. If the head of the femur be placed in its corresponding pelvis in this groove it will be seen how accurately the convexity of the head of the bone fits the concavity of the ischium. If also the head of the femur be placed on the sciatic notch, and is then moved towards the socket, it will be found that it slips over the convex outer surface of the acetabulum, and is directed into and along the groove just referred to; and this I believe must happen when extension is employed for the reduction of these dislocations—the head glides below the socket, and slips up again when extension is remitted. In attempting to replace the femur by manipulation, as this operation is usually practiced, by the rolling outwards of the shaft, the head is also carried along this groove, its progress through which may be traced easily enough, and incurs the risk of passing around the acetabulum, so that the head, when the thigh is extended, comes up on the obturator side, or rises even to the pubes, having described a half circle below the socket. This rolling of the head round the acetabulum is a chief objection to the plan of reduction by manipulation, and is almost sure to occur if the thigh is rotated outwards; in this way the ischiatic nerve has been seriously crushed, and the bruising of the parts has been such as to give rise, in one instance at least, to subsequent disease of the hip-joint.

To return to the case before us. After the patient had rested for several days I adopted the following plan:—The thigh was bent upon the abdomen, and I slowly moved the limb into a straight line with the body, so that the head of the bone could be felt projecting in the buttock, outside the tuber ischii. The limb, in a straight line with the trunk, without allowing any rotation outwards, was then drawn forward from the abdomen, and forced downwards (extended), and the head of the bone at once slipped into the acetabulum. These movements were made slowly and steadily, and the limb was extended with care, remembering the great leverage which we were making use of, and the position of the head, which was being pressed up into the socket. In two recorded cases the neck of the femur has been broken under a somewhat similar strain.

If these manœuvers are examined by the help of the skeleton, it will be found that by flexion, and by moving the thigh into a straight line with the body, the head is brought from the notch into the groove just above the outer side of the tuber ischii. Here it is opposite the least prominent part of the lower edge of the acetabulum, and if the femur is depressed whilst in this position the head easily slips into the socket. Dr. Markoe, with the addition of a rocking movement as the thigh is extended, and Dr. Hamilton, employ somewhat similar manœuvres, and they speak favorably of their success.—*Lancet.*

REMOVAL OF FOREIGN BODIES FROM THE EAR.

London Hospital.

The method we are about to describe is so simple that probably it may have occurred to others, and it has indeed been recommended in print by Mr. Hutchinson some time ago. It has, however, not yet found its way into our best manual of Aural Surgery (Toynbee, by Hinton), which advises the disappointing plan of syringing, whilst others still recommend the dangerous use of forceps or scoop. Instead of trying

either of these, let the surgeon take six inches of fine wire and double into a loop; then, having the patient placed on one side, pass the loop into the ear as far as it will go, and turn it a little gently. At the first or second withdrawal the foreign body will come out in the loop. The wire being flexible gives no pain, and cannot possibly do damage. It is almost certain to find its way round the foreign body, however deeply the latter may be placed, or however closely it may fit the cavity. Mr. Hutchinson asserts in his advocacy that it is very much easier to use, very much safer, and lastly that he has several times succeeded with it in cases where other means had utterly failed. The scoop he regards as especially likely to do mischief, since it involves pressure against the wall of the auditory canal. There is in the London Hospital Museum part of the temporal bone of a child who died in consequence of a small bean having been forced by the scoop through the membrana tympani into the inner ear.—*Medical Times and Gazette.*

A CASE OF POPLITEAL ANEURISM SUCCESSFULLY TREATED BY FLEXION.

By T. Holmes, M.A., Surgeon to St. George's Hospital.

S. D., aged 45, a laborer, was admitted into St. George's Hospital, April 28th, 1868, on account of aneurism in the left ham. The history given was that six weeks previously, when lifting a heavy weight, he slipped, and his heel went into a hole in the ground. In recovering himself, he gave the limb a severe twist; but he did not feel any pain till about a fortnight before admission, when he became sensible of constant pricking pain in the ham.

On admission, a small aneurism was found. The *bruit* was very distinct. There seemed no solid in the sac, for the tumor almost entirely disappeared after compression of the femoral artery. The pulsation was not very violent. The man seemed in good health and spirits. He was left quiet in bed for two days; the bowels were cleared out; and he was allowed ordinary diet. On April 30th, at 3 P.M., the flexion treatment was commenced, on the plan first suggested by Mr. Ernest Hart. The pulsation was decidedly weaker than on admission; it was greatly checked by forced extension of the limb, and was completely stopped, as far as could be ascertained, by extreme flexion. The leg was bent on the thigh as far as possible, and fixed in that position by bandages, a leather collar being put round the thigh, and another round the leg, and the two attached by a few turns of the bandage. The thigh was bent, and the limb laid on a cushion. The patient slept tolerably that night, but complained of a good deal of shooting pain. However, there was no intolerable inconvenience from the position. The bandages were readjusted, and the pulsation found to have diminished considerably. Next day, May 2nd, the *bruit* was not perceptible nor the pulsation, and the aneurism was, in fact, cured; but the flexion, as it really gave the patient no inconvenience, was continued for another day, when it was finally removed (2 P.M., May 3d). The patient was kept in the house under observation for ten days more, during which time the tumor, now perfectly consolidated, continued to diminish in size. When he was discharged (May 13th), there was a little lump in the ham, much resembling a chestnut in size and feeling.

I communicate this case as an example of popliteal aneurism, apparently cured without the slightest danger to the patient, and without any suffering whatever. The case was not a formidable one; still, in old times, the femoral artery would have had to be tied, and the patient's life and limb thereby exposed to great danger. Instrumental or digital compression of the femoral artery would, doubtless, have succeeded in this instance; but the inconvenience and pain to the patient, and the trouble to those about him, would have been considerable. It is worth inquiring whether the cure obtained by flexion is often temporary. In this instance, the tumor diminished and hardened so much during the ten days the patient was under observation, that there seemed good reason for concluding that the tumor was firmly consolidated by what Broca calls "active clot." In a case lately at St. George's Hospital, under one of my colleagues, after the apparent cure of a large aneurism by flexion (*i. e.*, after pulsation had stopped), the tumor began to enlarge—still without pulsation—and ultimately burst. But the same thing has been noticed after all other methods of treating aneurism, except the old proceeding of laying open the tumor.—*British Medical Journal, June*, 1868.

TREATMENT OF SYPHILIS.

In the Memoires et Bulletins de la Société Medico-Chirurgicale des Höpitaux et Hospices de Bordeaux (tome 11, 1869), is a very interesting paper by M. Moussous, upon the past and present treatment of syphilis. The principal points in the paper are thus summed up:

1. The idea of treating syphilis without mercury is not new.

2. In the rational treatment of the fifteenth century, by consecrated pieces of wood, and the Portugese method, mercury counts for nothing.

3. Blenorrhagia—simple chancre, with its local complications—syphilis, with its general poisoning of the system—are three distinct maladies, and are not to be treated in the same way.

4. The cauterization of the infecting chancre as a preventive of constitutional syphilis, is of no utility, the syphilis being established when the chancre has appeared.

5. Mercurial treatment, however well conducted, and though instituted at the budding forth of the chancre, is incapable of preventing the general manifestations, but only defers the period of their usual occurrence.

6. If the mercurial treatment be reserved for the time when the general symptoms appear, it then has perhaps more influence upon them, to the extent of making them disappear more rapidly.

7. Mercurials are specially suited to the secondary symptoms.

8. The further syphilis advances towards its later forms, the more mercury loses of its influence upon it.

9. In the tertiary period the hydriodate of potassa is the drug on which the most reliance is to be placed; it is of service also in the period of the prodroms which precede the general symptoms; it is, therefore, the medicine for the commencement and for the end.

10. Syphilis may disappear wiihout any interference—*sponte sua.*

11. An eclectic treatment, in which one part is assigned to the reactions of the organism, another to mercury and the hydriodate of potassa, to which may be added iron, quinine, and certain warm mineral waters, would assuredly be the best suited to bring about the cure of syphilis.—*Boston Med. and Surg. Journal.*

EPISTAXIS AND THE MEANS OF ARRESTING IT.

Dr. John Thompson, (*British Medical Journal*), recommends the following simple, and, in his hands, very successful treatment as a substitute for the ordinary method of plugging the nares. A strip of lint, as broad as the finger, and twice the length of the nasal passage, is folded over the "bowl end" of

an ordinary director, and introduced along the floor of the nostril until it reaches the throat. The director is then withdrawn, "giving it a wriggling movement, so as to leave the lint rumpled, and loosely distending the passage. The result is, that the blood rapidly permeates and distends the lint, a large coagulum is formed, and the bleeding completely arrested."

TAR-WATER IN CATARRH OF THE BLADDER.

Numerous observations have shown positively the indisputable efficacy of tar in the treatment of catarrh of the bladder; it is the best modifier of the mucous membranes of all the genito-urinary organs. Its action is prompt and remarkable; it increases the urinary secretion, facilitates the exit of the urine, and calms the intolerable pains which are known only to those affected with this disease. Tar-water is prescribed in these affections by the mouth and by injections in the following doses:—For injections (three times daily), one part of tar-water to four parts of water. As a drink (five times daily), a teaspoonful of tar-water to a cup of water.

Observations made at the hospitals for the aged in Paris.—*Boston Medical and Surgical Journal.*

EXPERIMENTS WITH LIGATURES.

Dr. B. Howard, at the end of last year, exhibited to the Pathological Society of New York three specimens of ligature of the carotid arteries in sheep, by different ligatures, and in different manners. In the first experiment, he applied a silver wire ligature to the common carotid of a very strong sheep, and fastened it by twisting it very tightly. Fifty-six days afterwards, he cut down through the cicatrix, and found that the collateral circulation which was established was very complete, and that the capillary circulation was not great; so that there was little hæmorrhage. On coming down to the point of ligation, he was astonished to find what at first appeared to be an aneurism, but which turned out to be an abscess full of inspissated pus. It occupied a space of about four lines on either side of the ligature, beyond which points the plugs were intact for about seven lines. In the centre of this abscess lay the ligature with the middle and lining coats of the artery completely sloughed away and detached.

In the second experiment, he used a leaden ligature, and had it rather large in order to avoid its cutting through; he tied it tightly. Twenty-six days after, he cut down through the cicatrix, and instantly a pellet of pus appeared in the incision, as if propelled from behind. He made another incision, when the ligature came away. As he proceeded towards the original site of the ligation, the hæmorrhage was exceedingly great. He ligated above and below, and removed the abscess. There had been a good deal of inflammation around the artery, and there was considerable fibrinous material effused in the neighborhood. The artery itself was well plugged on its cardiac and distal aspect, and was perfectly occluded. Between the proximal end of the distal plug and the distal end of the cardiac plug was apparently an abscess containing about a drachm and a-half of sero-purulent fluid; otherwise, the clot was perfect. The points of interest in this specimen are the great amount of irritation and inflammatory action that occurred about the metallic ligature. In the third experiment, he again used a silver wire ligature, but tied it incompletely after the manner of the silk ligature, and was careful to tie it loosely—tight enough to diminish the canal of the artery, but avoiding a complete closure. On cutting down afterwards upon the cicatrix, he could scarcely discover where the ligature had been applied, so small was the amount of irritation it had produced. The plug in this case was more perfect than in either of the other cases. There was no abscess, the fibrinous deposit being just sufficient to cover the ligature. The result, so far as occlusion, extent, and firmness of the plug are concerned, is very much better than in either of the other cases. From these experiments, so far as they go, he concludes, 1st, That the metallic ligature does not always reside quietly where it is placed. 2d, It is not always necessary for complete occlusion of the artery to tie the ligature so tightly as to divide the middle and internal coats. 3d, The last experiment is very suggestive; that a silver wire ligature applied so loosely as to produce no lesion of the artery, nor to completely arrest the circulation, may suffice for the cure of aneurism, when an ordinary ligature would be rendered inexpedient by the condition of the arterial coats.—*Medical Record.*

MISCELLANEOUS.

FOOD FOR BABIES.

From an interesting article on "Food for Babies," published in the London *Medical Times and Gazette*, we make the following extracts:

Of milk, we have that of the ass, goat, and cow. Asses' milk is by general consent the best substitute for the woman's for most delicate children; and, dear as it is, it is well worth the money. The goat's is a rich milk, with a strong curd, and only adapted for robust children. The milk of the cow is, of course, the staple. And whilst for general purposes it is quite right that milk should be brought from any distant part of the country, it must be confessed that a few cows should be kept in town in hot weather, that their milk may reach the baby part of the population fresh, unshaken, and just as yielded by the animal. But cows' milk is too rich in curd for the human baby, whose muscular movements are almost confined to breathing, crying, and the heart's action. So it must be thinned, and the simplest way is the common one of adding an equal part of water (the water being gradually diminished as the child grows older) and a small quantity of white sugar. It is a refinement to use the sugar of milk, instead of common cane sugar, but whether there is anything gained we never could satisfy ourselves.

The test of any kind of baby's food is found in the fact that the child thrives—that it is satisfied after its meals, not subject to fits of pain in the stomach and flatulence, nor yet to fits of colic in the bowels—and that the residuum, which is generally produced on a napkin for inspection, does not show undigested food. All these things are self-evident. A child ought regularly to grow, to be plump, and to gain in weight every week; and if it do not, something is wrong. Secondly, the child ought to be satisfied and go to sleep after its food; but here the junior practitioner ought to be aware of one physiological fact—when a child is in pain in the abdominal organs, it often displays insatiable hunger, has a tendency to suck greedily, and this though the stomach and bowels may be loaded with undigested food. Ignorant nurses kill many a child by inattention to this point. The child cries after food; therefore they say the food is not good enough, "the milk does not satisfy," etc., and forthwith they give the child some half-solid pap, and dose the mother with over-rich food and alcohol. A purgative dose of oil is the best remedy when a baby is unreasonably hungry after food; castor oil is generally used, but any oil or soft fat will answer the purpose. The old custom of giving a bit of the fat of a pig is founded on reason and experience. Lastly, the practical fact remains that no undigested food ought to be found in a baby's napkin. Any

mother may be taught that lumps of curd and masses of undigested starch can give the child no nourishment, but decompose in the bowels, and cause first pain, next diarrhœa. A healthy baby's napkin should not be offensive—of course, it has a faint peculiar odor, but certainly it does not stink, and if it do, either improper food has been given, or proper food has not been digested.

In other cases, in order to diminish the proportion of curd, it is useful to give *cream* diluted with new milk and water; and, to prevent the curd of cow's milk from coalescing into hard lumps in the stomach and passing undigested, the milk may not only be diluted with water, but with effervescing soda-water (this is called artificial asses' milk) or potass-water. or lime-water. Sometimes a very little of the solution of magnesia is added.

But this purpose (*i. e.*, the making the curd softer and more digestible) is generally effected by mixing it with cereal food or the starches. Theoretically speaking, we do not want the nitrogenous elements of the cereals, because the cow's milk contains enough of them. Hence arrowroot or sago may suffice, if it be understood that the child is to live upon the milk, and that these starchy elements are superadded to modify the milk, and not to be substitutes for it. Still, general experience is in favor of some cereal. Barley-water made from pearl barley, and mixed with an equal part of milk, is an admirable food for most children. Robinson's patent barley deserves praise. Oatmeal gruel and milk agrees well with the robust. Brown and Polson's preparation of maize, and the maizena, seem favorite preparations. On the whole, however, wheat tends to displace the other cereals. The flour of wheat is often baked or boiled, and, when so cooked is boiled afresh with water and milk. Or it is made into biscuits, of which Robb's, Lenmann's, the Norwich knobs, "tops and bottoms," and rusks, are popular samples; or into a farinaceous food—that is, a powder composed of wheat flour or biscuit, with or without admixture of other cereals, and already acted on by heat, so as to require little or no cooking, (Hard's, Neave's, etc., etc.).

This is the place to notice "Liebig's soup," a compound of milk, wheaten flour, and malt, with a small quantity of bicarbonate of potass. The object of the malt is to convert the starch of the wheat into sugar, and so to save the stomach the trouble of that process; whilst the cow's milk is enriched with the phosphates of the wheat and the added alkali. The thanks of society at large are due to Liebig, not only for the care and patience with which he has worked this idea out, and the liberality with which he published it, but likewise for the impetus which it has given to the study of the whole subject of infant food in connection with mortality.

The original receipe prescribes ½ ounce of wheaten flour, ½ ounce of ground malt, and 7¼ grains of bicarbonate of potash, to be well mixed with 1 ounce of water; then 5 ounces of cow's milk are added, the whole is heated gently till it thickens; then it is removed from the fire, stirred till the starch is converted into sugar, as indicated by the liquid becoming thin, again boiled and stirred for some minutes, and lastly strained. For use, this requires to be much diluted for young babies, less for older ones. * * * * *

As for results. We believe that of any six infants one would refuse to swallow it; one would take it without benefit; but the remaining two-thirds would take it greedily and thrive on it. We have known it put a stop to so many of the miseries arising from undigested or indigestible food, that it has, we think, already earned for itself a permanent place. What form of it will ultimately be the favorite is another question.

The objections to Liebig's food in its common form are, first, the time, trouble and nicety—it cannot be prepared in less than twenty minutes, and not every nursemaid or mother has the intelligence sufficient. Secondly, there is the considerable amount of indigestible husk, often very difficult to separate by straining, and consisting of spicula that look very formidable to any tender mucous membrane. Thirdly, as a theoretical objection, we mention its too saccharine nature and the absence of fat.

The first objection has been met by Savory and Moore, who have put together and prepared the ingredients in such a way that they only need the addition of water and milk, and no straining nor boiling. Mr. Mellin's preparation, if it can be got, of course avoids all trouble of cooking; and we may say that the malt he uses is most scrupulously cleansed from husk. There is also to be procured at Mr. Van Abbott's a preparation called "Liebig's Food for Infants concentrated," the invention of Mr. Ed. Lœflund, chemist, of Stuttgart: it is a thick syrup, containing a concentrated solution of the wheat and malt elements. It has, when mixed with milk in due proportion, a sweet, somewhat empyreumatic, bitter taste, and this is the general character of the food, however prepared; but there is a distinct acid treacly reaction in Mr. Lœflund's syrup. Mr. Mellin has made an extract in the form of granular powder, soluble in cold water, very palatable, free from acidity, and much more portable than Lœflund's syrup. Lastly, we must notice the very ingenious malt biscuits made by Spiking, of Dover street: these contain the malt and wheaten flour in the form of a biscuit; of course they are portable, and keep any time, and require no more cooking than Robb's or any other nursery biscuit. * * * *

We have now, we trust, set forth a pretty general view of infants' food, and shall add but three or four practical hints: 1. The advantage of adding cream from time to time, especially if the baby is constipated. Want of fat is the cardinal defect in Liebig's soup. 2. The expediency of adding a small quantity of aromatic water to all infants' food, such as dill, anise, etc. There is a very popular food in some counties, consisting of equal parts of barley-water and milk, with one teaspoonful of good brandy to the pint. Bad for the babies' livers, some would say; but no harm is found in practice. 3. The expediency of giving delicate children small quantities of pure gravy or beef-tea sweetened, or a few grains of raw meat ground to a pulp. If these agree, a child is almost safe. 4. No one kind of food can agree with all children. It has provoked us to see children dying on a diet which did not suit them, without an effort to sift and combine various elements till the right thing could be found. 5. The importance of teaching the poor that food for babies should be *thin*, and that a thin food may be more nutritious than a thick one.

LIQUOR FERRI PERSULPHATIS AS AN ANTIPERIODIC.

Dr. G. H. Lenoir states that he has tried the liquor ferri persulphatis in several cases of intermittent fever, where quinia had failed, and even produced unpleasant effects. "Immediately after the administration of the iron the chill ceased, and in but one case was there a recurrence of the malady, and in that the patient had but one chill, after which there was no symptom of a recurrence." He gave the solution in doses of from eight to fifteen drops every four or six hours, generally preceded by a full dose of compound cathartic pill.—*American Journal of Medical Sciences.*

AN INVITATION TO THE DOCTORS BY THE NEW YORK MEDICAL SOCIETY.

Doctores! Docum nex mundi nitu Panes; tritucum at ait. Expectu meta fumen tu te & (*sic*) eta beta pi. Super attento uno Dux, hamor clam pati: sum parates, homine, ices, jam, etc. No Sideror Hoc. *Festo resonan floas sole.*—Nov. Ebor, Jan. 20.

ORIGINAL COMMUNICATIONS.

THE MIASMATIC DISEASES OF CALIFORNIA.

By J. CAMPBELL SHORB, M.D., San Francisco.

[Continued from Page 55.]

The condition of stupor continues until the fever, which came on simultaneously with it, in some measure abates, when it generally disappears, and from all we can learn it is a phenomenon almost exclusively associated with the first paroxysm, and if it reappear in the second paroxysm, it presents itself shorn of all its original violence, scarcely ever exciting any alarm or calling for active remedial measures. There is a state of stupor connected with some of the severer forms of Panama fever, which will be noticed in due time, and which is generally the prelude to more formidable symptoms—rapid sinking of the powers of life, and ultimate dissolution. Both probably spring from the same cause; in one instance the energies of resistance of the system are able to check the destructive operations of a poison, which in the other instance, in concentrated virulence, so impresses the centres of life as to render reaction and recovery impossible. Both may be the direct results of the influence of the poison on innervation. There are other ways, however, of explaining these phenomena, which, though hypothetical, are founded upon many reasonable considerations. The condition of the system throughout must be carefully considered during the period which immediately precedes the occurrence of the stupor. The rigor is at its height, the blood leaves the surface of the body and concentrates in large quantities in the internal organism. Congestion results; and in obedience to the physiological law that secretion is in inverse proportion to the fullness of the blood vessels, we have the very grave accident of complete arrest of secretion. The liver, the kidneys, the spleen, the glands scattered profusely throughout the intestinal tract surcharged with blood, cease to elaborate their appropriate secretions, and matters remain in the blood which seriously compromise the integrity of the vital fluids, poison the brain, and which, if retained beyond a certain period, ultimately destroy life. The aggregate influence of the retention of these morbid matters, acting upon the great nervous centres, may have the effect of producing the stupor of which we have spoken.

The exhaustion following the first paroxysm of Mountain Fever is very great—much greater in fact than that ordinarily associated with very violent attacks of pure intermittent fever. The patient is glad to lie abed, and far from feeling any temptation to leave his room—is averse to the slightest motion, and keeps in the same position for many hours together. Following close on the termination of the first paroxysm there is observed a very marked change in the blood. The ruddiest in complexion and the strongest physically are noticed growing pale almost with the suddenness with which terror or passion sometimes blanches the countenance, and this pallor is very slow to leave, continuing sometimes long after the severe symptoms have all disappeared, still lingering, whether the original attack has been long or short, severe or insignificant. We hold that this peculiar change, wrought in the blood, flows from a modification of the cell action of the spleen set on foot by congestion of its parenchymatous substance, or springing from some peculiar action of the miasmatic poison upon the cells of the organ. We believe that the science of physiology has demonstrated that the colorless corpuscle, elaborated by the spleen, by progressive metamorphosis gradually develop into the typical red cells of perfectly matured blood. It has further demonstrated that these perfected cells are extremely short lived, living through only ten or twelve tours of the system; and taking the mean of many experiments made with a view of establishing the amount of time necessary for the blood to complete its journey through the system, we know this is accomplished in less than one minute; the life then of each red blood cell is comprised in ten or twelve minutes; hence the necessity for that organ to be kept in a perfectly healthy state to which is entrusted the rapid renewal of these cells, which perish so quickly, yet upon which all the wonderful phenomena of secretion, absorption and nutrition, of life, depend. The slightest modification in the cell action of the spleen may have the effect of arresting the elaboration of new cells; the old ones die, and their *hæmatin*, subjected to the action of the liver, passes into new chemical combinations, thus the coloring matter of the blood, upon which the ruddy hue of health depends, is rapidly and almost entirely destroyed. We know that in nearly all fevers there is a tendency to enlargement of the spleen, mesenteric and lymphatic glands. This tendency is well pronounced in the different typhoid processes, but in no morbid condition does it appear in so marked a manner as in the disorders resulting from the operation in the system of paludal poison. Indeed, enlargement of the spleen has come to be regarded in the light of an integral portion of the mass of morbid changes found in connection with an attack of malarious disease. We cannot admit an enlargement without admitting at the same time a change in function from a healthy standard, and a modification in the cell action of the part, the importance of which cannot be overrated. Viewing, then, the great blood-making organ, the spleen, as the first grand objective of an attack of malarious disease—keeping well in mind the changes which ensue from its operation there—it is an easy matter to understand and explain the pallor which follows so closely on the heels of an attack of this fever. Why the pallor in Mountain Fever is more rapidly developed and more persistenly maintained than is the case with other forms of malarious disorders, we are at a loss to imagine. In long continued intermittent disease, no matter where or how originating, paleness comes on at last, and every one is familiar with the description which travelers have given us of aguish countries, of those for instance, who live the year round in the Campagna of Rome, or in certain localities in India.

Bishop Heber, for example, in describing the surroundings of that malarious tract in India, which borders on the Rohilcund country and stretches toward the Himalaya Mountains, tells us that the whole skirt or margin of the mountains is surrounded by a thick forest with a marshy soil, and an atmosphere, during two-thirds of the year, more pestilential than the Sunderbunds or the Grotto del Cane. He describes the natives of the villages through which he passed as singularly wretched beings, ugly and miserable in the extreme, with large heads and particularly prominent ears, unsightly noses, tumid bellies, slender limbs, and a remarkable sallowness of complexion.

These, and illustrations of the same truth which may be observed at the present day in many localities of our own country, are results of a long continued operation of the paludal poison, and are so common that they elicit no comment. But here we have a fever which in an incredibly short space of time develops those phenomena which under other circumstances, with the same morbid process, are of very slow evolution, and which indeed, in some cases, even where violent disease is present, are never seen.

Paleness, or pallor, is not a disease, it is merely a symptom, and when of momentary duration or the associate of a transient attack of nausea, or of mental disquietude flowing from

anger, terror, or the reception of grievous intelligence, it cannot be regarded as a sign of serious import; but when in the contemplation of its persistency our thoughts are carried from the mere consideration of symptoms to dwell on the very alarming and often irremediable condition of which the pallor is the superficial indication—on the constitution of the blood which is broken up, almost destroyed—on the fact that its fountain head is poisoned, dried up, and incapable of restoration—then indeed pallor becomes fraught with terrible significance, presaging trouble which all the mighty machinery of medicine often fails to check or remove.

In the production of this pallor the spleen must not be regarded as the only organ which, altered by disease, is capable of developing the phenomena. Reference has already been made to the fact that in the typhoid processes and malarious diseases the lymphatic glands become affected. They become enlarged, and their activity is vastly increased.

We know that at the present day, physiology, throwing aside all former theories and ideas in reference to the reproduction of blood by division or partition of already existing cells, teaches that in the blood of an adult all the morphological elements, whatever may be their nature, are at present considered to be derived from sources external to blood.

We have spoken of the spleen as one of these sources; we have yet to mention the lymphatic glands, elaborating, as they undoubtedly do, a fluid which appears "in double trust," first to convey certain substances into the blood which come from the tissues, and at the same time to carry with it the corpuscular elements, out of which the blood cells continually recruit their numbers.

Pathology has revealed the fact that the whole lymphatic system suffers in malarious disease. The glands become profoundly disturbed—irritated; there is an afflux of blood to the parts. We do not believe that the irritation runs over into inflammation, but certain it is there is a swelling and enlargement of the glandular apparatus and the introduction into the blood of a large number of colorless cells, or lymph corpuscles. The ratio which in health obtains between the red and colorless corpuscles of the blood is thus destroyed, and out of this disturbance comes the pallor of which we have been speaking.

It is no argument against the position we have taken, to contend that if, under irritation of the lymphatic glandular system, a large number of colorless cells are poured into the current of the circulation, they would maintain the integrity and uniformity of the blood. If these cells were the products of perfectly healthy glands, we would admit at once the force of the objection; but, developed under the unfavorable auspices of an irritation set on foot by the presence of a poison, these semi-vitalized cells reach the blood, imperfectly elaborated, and are slow to yield themselves up to the action of the vital principle, which, through progressive metamorphosis, enables them to reach perfection and maturity in the red cell. Indeed, in many cases, we believe these colorless cells, intoxicated with the poison derived from the parent system, are incapable of higher transformation, and go reeling through the circulation useless, inert, and unproductive. While these colorless cells, therefore, by inherent weakness, are prevented from reaching a higher state of organization, while they are rapidly accumulating in the blood, the red cells are perishing with old age, carrying out of the system the coloring matter which, in their prime, they possessed, and in the disappearance of which may be found an explanation of the pallor which attends sooner or later all forms of malarious disease.

We have written much more on this subject than we originally intended, but the question of this great change wrought in the blood, through the agency of paludal poison, is one which would have to be considered at length in some portion of a treatise on miasmatic disease, and the present seemed a fitting occasion, for its discussion and amplification. It belongs to no one phase of miasmatic disorder, but runs through the whole family of diseases which belong to this order, and probably would not have been mentioned here had not its inexplicable suddenness in connection with Mountain Fever forced itself upon our consideration.

The disease is one which, as far as our experience goes and from all we can learn, belongs to the mature period of life. No cases in children have been reported. It may happen as the localities become more populous in which this disease is endemic, that children will be attacked also. These places up to the present period in the history of California, are the haunts of miners and other adventurous spirits, or are visited by travelers, either from curiosity or for the purposes of investment, and are not the homes of families or communities. We are inclined to believe that the advent of women and children, the introduction of families, into these wild mountain settlements, will not materially add to the number of cases of Mountain Fever. Indeed, the disease may decrease in proportion as the population increases. The presence of woman, in more senses than one, exercises a salutary influence. Homes are provided for men who before were exposed to all the inclemencies of the weather; better habits grow up in virtue of her presence; intemperance, the fruitful source of physical degeneration and disease, becomes less; men learn under such circumstances to pay more attention to the necessity of being well clothed; and, having their food prepared by skillful hands, served at judicious intervals, their nutrition is more persistently and uniformly maintained, and uninterrupted health results. Besides these considerations, we know that men think more of their health when they have their wives and children to support than when they are alone; they grow anxious to remove the existing cause of disease for fear their families may suffer; the medical police of their surrounding is carefully attended to, and a very unhealthy site may, in this way, in a short space of time be entirely reclaimed, and sickness will almost entirely disappear.

More than this, as the population of a place increases, better medical talent is invited there, and diseases which before baffled such skill as was presented to them, now yield readily to judicious and scientific treatment. The sensible practitioner becomes, too, the health officer of his little settlement, points out the sources of disease, and puts into execution such measures as will end in their removal. He teaches men how to live, that sickness may be kept away; he selects sites for dwellings; he analyses the waters used for drinking; points out such as contain poisonous matters, and such as are perfectly pure; and in a thousand ways becomes the benefactor of the place of his adoption, driving out disease and causing health to reign in its stead.

(*To be continued.*)

PATHOLOGY AND TREATMENT OF UTERINE DISPLACEMENTS.

By JOHN SCOTT, M. D., F. R. C. S. I., Etc.

Surgeon to the California State Women's Hospital.

It is difficult to overrate the frequency with which misplacements of the uterus are met by all who are engaged in the treatment of the diseases of women, while the importance attached to them varies, according as the observer looks upon them as the source of all the ills of which his patient is the

victim, or only the consequence of an affection, the removal of which will render them a matter of secondary importance. This much, however, is universally admitted: that uterine displacements are generally accompanied by such an amount of local suffering and derangement of the general health as to demand our most earnest attention; and, that the treatment hitherto pursued has been attended with such unsatisfactory results that the relief and not the removal of the affection is considered all that is attainable. It may be considered presumptuous on my part to attempt to throw any new light on a subject which has engaged the earnest attention of the most eminent members of the profession. But I do so for the following reasons: 1st. Because I happen to have enjoyed such extended opportunities for the study of the affection as have led me to take definite views as to its pathology; and, secondly, because the treatment I have long instituted differs from any that I am aware of, as being laid down by authors, and is attended by a most gratifying success. In estimating the frequency of uterine misplacements I go further than other writers, and assert that in nearly all the chronic affections of that organ, which the physician is called on to treat, *some* malposition of it exists; and my belief is, that were its existence duly recognized, and adequate means adopted for its removal, the practice of uterine surgery would be held in far higher estimation than it now occupies in public estimation. Take, for instance, a common case; a patient complains of such local and general ailments as lead the attendant to suspect the existence of uterine disease, and on examination he finds erosion of the os, with perhaps hypertrophy of the cervix with or without induration, and the conclusion too commonly arrived at is that no further investigation is needed; that the affection is entirely confined to the os and cervix, and that such topical applications as are deemed sufficient for its removal from that locality are all that is needed to insure the recovery of the patient. How frequent the disappointment but few will deny. And the history of one case is the history of all. By the use of constant cauterization the ulceration is at length healed, while the induration and hypertrophy generally withstand all attempts at removal; but the os *looks* healthy and the patient is pronounced cured. The patient, however, differs from the doctor, and asserts that her inward local pains are unremoved, and her general health as bad as ever, and she goes from one medical man to another till she at length relinquishes treatment altogether, as useless, and feels tempted to believe that in the sufferings incident to humanity woman's lot is unequal. Now, I maintain that in such a case the erosion of the os and the induration of the cervix are but the expressions of a disease which effects the body of the uterus, and that an accurate diagnosis will probably demonstrate the existence of a curvature of the uterine canal, with more or less flexion of the body consequent on an interstitial deposit in either wall of the uterus, causing an interruption of the circulation, and disturbance of the nutrition of the organ, the ratification of which is essentially necessary to its restoration to health. In fact, nothing has so conduced to the existence of a false pathology of uterine diseases as the attempt to divide the uterus into different cavities, and to assign to the lower segment the capacity of contracting disease, while the upper portion is supposed to retain its integrity, assigning as a reason the anatomical differences which exist between the body and the cervix, coupled with the assertion that the latter has a greater vascularity and a higher vitality than the former. No assumption could be more incorrect. The uterus is a *whole*, and when disease affects any part of, it the other parts suffer. And it is an undoubted fact that the body of the uterus has a larger vascular supply than the cervix. It has a larger share in furnishing the catamenial discharges, and the changes which conception and parturition entail, and is therefore more liable to the attacks of disease. If this reasoning, then, is correct, we shall learn to take a more comprehensive view of uterine affections, and regarding the undivided erosion or induration only as the evidence of a deeper seated disease, we shall be led to such a critical explanation as will enable us to overcome difficulties in the treatment hitherto deemed insurmountable. A careful consideration of the healthy, unimpregnated uterus, its size, position and attachments, will help us to estimate correctly the changes effected by disease in the organ itself, or in the parts surrounding it, and the malpositions to which it is necessarily liable. It has been the fashion to consider the uterus as *tethered* or *suspended* in the abdomen by the ligaments which attach it to the pelvis, and to speak of misplacements as dependant on their relaxation; but the weight of modern testimony tends to discredit the assertion, and the most cursory examination will prove its absurdity. No viscus in the body enjoys greater mobility than the uterus; for the finger applied to the cervix, or the sound in its cavity, will effect its version in any direction with the utmost ease; while its position in the pelvis, with its liability to be affected by the surrounding viscera, or changes of bodily posture, demonstrate the absolute neccessity for such an arrangement. The fact is the organ is more *poised* than suspended, and is mainly kept in its position by what Dr. Matthews Duncan has so ably demonstrated as "the retentive powers of the abdomen," aided by the support which the vagina and surrounding structures afford. It is not less important to appreciate the axis which the healthy organ maintains if we would estimate aright the deviations which disease occasions. And here again the majority of the statements made by writers will be found erroneous, from having been based on pathological examinations of an organ so notoriously prone to disease, and from a faulty examination of it in the living subject. As examinations are ordinarily made, I maintain that it is simply impossible to arrive at a correct knowledge of the actual condition of the uterus, and its relation to surrounding parts. And till a more satisfactory method is adopted, the diagnosis is simply worthless; and, as an instance, I may mention that patients have been sent to me as suffering from anteversion when a directly opposite condition prevailed, and *vice versa*. Commonly a patient is subjected to a tactile examination while lying on the left side, and then a conical speculum is introduced which necessarily pushes up the cervix and displaces it, while through the unbending tube the sound is, with more or less difficulty, introduced into the twisted uterus, and the direction of its canal ascertained. Contrast this mode of examination with that laid down so admirably by Dr. Marson Sims. The patient laid on the back, with the knees drawn up, and directed to breathe easily, to allow of abdominal relaxation, and with one hand in the vagina and the other on the abdomen the state of the organ and its relation to the surrounding viscera can be most satisfactorily estimated, and any flexion or other misplacements easily ascertained. The patient is then placed on the side, with the knees both drawn up, the left hand behind the back, and the spoon elongated with the duck-bill speculum is introduced, and *as it merely presses on the perineum and the back wall of the vagina*, the uterus is found occupying its position *undisturbed by instrumental pressure*, and capable of having its cavity satisfactorily explored by the sound. Thus conducted, the examination will prove that the normal position of the healthy uterus is this: The os points towards the hollow of the sacrum, and the fundus is directed towards a point nearly midway between the umbilicus and pubes, but nearer the former than the

latter. It may appear superfluous to enter into these details, but I am induced to do so because the former examination I have alluded to is still practised by the majority of the profession, and I wish to demonstrate its worthlessness in diagnosis, and the evil it entails. If my previous statements are correct, it follows that an organ so loosely attached, and kept in position while in a state of integrity by the pressure of the surrounding viscera and the sustentative structures which support it, must necessarily be liable to malposition by any cause which adds to its gravity and at the same time impairs the tenacity of the structures that support it.

Setting aside the influences of fibrous growth and ovarian tumors, I believe the *true pathology* of uterine displacements will be found in the existence of *chronic inflammation of the organ, and the results it entails;* and if this opinion is correct, the treatment based on it will embrace at one and the same time the removal of the malposition which exists and the affection which has produced it. *Mere increase of substance* alone will not cause misplacement, but in chronic inflammation we have that which causes such a degradation of the sustentative structures, such a relaxation of the vagina and vulva, especially, as naturally leads to it. In this way we can perceive how the effusion of fibrin in either wall of the uterus will lead to an ante- or a retro-version, while a more uniform enlargement of the organ will tend to its prolapse. The fact that the prolapse may exist while the uterus is not materially enlarged, (though this is seldom the case,) does not invalidate this reasoning, for, in such cases, the effects of inflammation are only too apparent on the sustaining structures, and in addition there commonly exists such an amount of *rectal disease* as will account for the disproportion between the extent of the prolapse and the size of the uterus.

We would now say a word or two as to the *causes* of uterine misplacements, both in the married and the virgin, in support of the assertion at the beginning of this paper, namely, the frequency with which they exist as a complication of uterine diseases.

The causes which give rise to misplacements in the married principally arise from miscarriages and deficient involution of the uterus after parturition, and the evil once produced naturally increases and perpetuates itself. When I speak of miscarriages and deficient involution I refer to the engorgements —whether partial or general—to which they give rise, followed, as they usually are, by chronic inflammation and effusion of fibrin-parenchyma itself. In the unmarried the causes are numerous; indeed it may be said that anything which produces a sudden arrest or suppression of the catamenial discharge tends directly or indirectly to induce congestion of the uterus, followed by the same consequences as above stated. Strictures of the cervical canal, by interrupting the normal circulation of the organ, will also give rise to local congestions, and consequences; and as the uterus undergoes a regular growth of tissue during the menstrual nisus, with a corresponding involution as it disappears, so is the involution likely to be arrested by any of the numerous causes to which accident or indiscretion may give rise.

Other causes contribute to the production of misplacements, but in what does not profess to be a systematized essay on the subject it is not necessary to enumerate them, and in our next papers we shall speak more in detail of the affection as it is commonly met with, its symptoms and treatment.

(*To be continued.*)

"CONSERVATIVE MEDICINE."

By E. MALCOLM MORSE, M.D., San Francisco.

Trousseau, Bennett, Austin Flint, and a large majority of the most intelligent men of our profession, both in Europe and America, are now the earnest apostles of the great doctrine of conservative medicine. Whether the asthenic type has always existed in most diseases, or whether some atmospheric influence, or some change in the human constitution during the last century, has made disease less sthenic than formerly, is a disputed question. On this point some of our best medical authorities differ. Dr. Watson thinks that the type of diseases has changed, and it is now more asthenic than formerly. "I am firmly persuaded," he says, "by my own observations, and by the records of medicine, that there are waves of time through which the sthenic and the asthenic characters of disease prevail in succession; and that we are at present living amid one of its adynamic phases."

On the other hand, Reynolds says: "It has been assumed that the *vis vitæ* of the British constitution has been lessened, or that the so-called type of its maladies has been altered; an assumption that has little to be said in its defence."

Bennett takes the ground that there has been no change of type. He says: "Let us for a moment consider what this theory implies, viz., that the constitution of mankind has become weaker and less capable of bearing depletion now than formerly; that the human pulse, by which this is tested, beats less vigorously when diseased than it did for hundreds of years, before the days of Cullen and Gregory; that when a strong man now-a-days is seized with an inflammation, he presents all the phenomena that used to be observed in a weak one; in short, that the human race has so degenerated during the last five-and-twenty years that the reaction which formerly used to take place in the economy no longer occurs, and that it cannot bear depletion so well. But surely this idea may be said to repose on no facts whatever, but merely on supposition; for when we investigate the effects of injuries after the battle of Waterloo and after the battle of the Alma, we find them, in the British army, identically the same. Neither has any change been observed, in this respect, in our civil hospitals. Our mental strength, commercial enterprise, engineering skill, martial daring, and bodily vigor might easily be shown never to have surpassed what this country can now boast of—facts entirely opposed to this theory. Then the treatment of inflammation without antiphlogistics has also been introduced among veterinary practitioners. Is it to be maintained, therefore, that our horses and cattle have also, as the result of civilization, been enervated, and that in them also the type of disease is altered? The supporters of this theory of a change of type in disease, claim as its fundamental fact a diminished vital force in the heart and pulse of man and animals to explain a change of practice. But what say science and positive observation of these assertions? It so happens that there is no subject in all physiology with regard to which we possess more elaborate and more exact information than we do concerning the pulse. In 1732 Stephen Hales published a remarkable series of experiments regarding the static force of the pulse, and the rapidity of the blood through arteries of different calibres. In 1828–29, similar observations were made by Poisseulle, with an instrument invented for that purpose, which led him to the same conclusion as that arrived at by Hales. Valentine confirmed these results in 1844, Ludwig in 1847, and Vierordt so late as 1855; so that not only is there no fact, whatever, in the support of the notion that the pulse of man or animals is weaker now than formerly, but all positive researches during a period of one hundred and thirty years prove

the very contrary. It appears to me, therefore, that the theory of the change of type, so far from being established on well-known facts, is, on the contrary, altogether fallacious, and entirely opposed to all the accurate data which histology, physiology, and pathology have accumulated in modern times." The advocates of a change in the vital force of the human constitution during late years, often attribute it to the enervating effects of civilization. Yet, it is a well known fact to those who have had the opportunity of observing diseases among the African race, whether they have been for years in this country, or on their arrival here, that they sink under depleting measures quicker than the white race.

Many physicians still cling more or less in practice, to their old ideas, though they are often unwilling to acknowledge it; and some of them try to be on both sides of the fence at once. They dilute the old antiphlogistic treatment with a little conservative medicine, and remind one of the old woman's plaster, that was cooling and warming at the same time. It is hard for them to give up their *pet theories*. They have had many patients that have recovered from very dangerous diseases under severe depleting treatment; and they have naturally imagined that, by their skill, these lives have been saved. It is hard to eradicate these pleasing delusions from their minds. It is very hard for them to be made to believe that many of these cases would have recovered had they been left alone to the great reparative resources of nature; and, that many patients have been killed by their severe antiphlogistic treatment, whose lives would have been saved had a more conservative method been adopted. This is not a mere hypothesis on my part, but it is a well demonstrated fact, which has been proved beyond the possibility of a doubt by numerous and well authenticated statistics.

Speaking of the tendency of continued fever to terminate in health, Dr. Watson says: "We see this tendency when the fever is left entirely to itself, and it equally exists when remedies are employed to regulate its course or to abbreviate its duration. No one can doubt, who has had much experience in fever, that this tendency is sometimes thwarted by the *nimia cura medici*, and that patients get well in spite of the well meant but *mischievous* interference."

In the great epidemic fever in Ireland, the mortality among the patients that were placed upon straw, and fed with soup, and left without medical attendance, was a great deal less than among those who were regularly treated by the physicians, according to the lights of those days. Whole armies of men, women, and children, in typhoid and yellow fever alone, have been hurled into their graves by blood-letting, mercury, depleting cathartics, and depriving them of the proper nourishment which was necessary for them.

These heroic remedies are now rarely used in acute diseases; but there are many, and often intelligent men, whose *ancient* medical prejudices still cling to them. They have this exploded bugbear—*inflammation*—on the brain; and, though they do not dare bleed, they still have their milder methods of depleting—their persuasive little drastic cathartics; their cooling antiphlogistic doses of tartar-emetic, to bring down the quick pulse of debility; their safe little system of starvation and death, called *low diet*.

I know this kind of physicians well, and have known them for twelve years. Meet them in consultation over an acute disease, when the beat of the pulse is rapid, and incipient exhaustion has just begun to render its impulse less strong; and recommend stimulants and nourishing diet, and you will have the satisfaction of being considered a fool. Tell them that brandy and beef-tea will diminish the rapidity of the pulse in these cases, and they will consider you a glorious specimen of professional ignorance and stupidity. These are the kind of physicians who are accustomed to speak of a disease, that would get well if left to nature, as if they had stopped the morbid process by their own skill. They speak of a patient of theirs who died in the following manner: "Poor Mr. A., nothing could save him. He died, notwithstanding the most powerful remedies I could give him." And of one who has had the good luck to get out of their hands alive, they say: "I cured Mr. B." When a more correct way of expressing it would be as follows: "My antiphlogistic treatment kept up until Mr. A. was almost in *articulo mortis*—killed him. Mr. B., however, had the good fortune to escape in spite of my *heroic* medicines, though I nearly finished him also." These same physicians will give nourishing diet and stimulants, but they generally wait until the patient is so exhausted by their previous *remedies* and the disease, that he has not strength enough for a reaction to set in.

Dr. Austin Flint says: "The progress of medicine within late years, as regards therapeutics, is characterized by the development of a principle which may be distinguished as *conservatism*. This term may be applied to medical as to surgical practice, and denotes an object which has not heretofore been sufficiently considered, viz: the avoidance of useless and injurious therapeutical measures. Conservative medicine does not interdict the use of the most potential of remedial agencies, but it enforces discrimination and circumspection in their use, recognizing fully their potency for evil as well as for good. The conservative physician is by no means a mere spectator of the progress of disease, but, in wielding the resources of therapeutics, he is careful to preserve the powers of life, following the injunction of Chomel, not so much to treat disease as patients affected with disease. It may be laid down as a golden rule in therapeutics, that active measures of treatment are to be employed only in cases in which they seem to the physician to be clearly indicated. The severity of disease, and the danger of the patient, be they never so great, do not alone constitute grounds for the employment of active measures. If they be not useful, they will be likely to do harm. Therapeutical measures, in proportion to their power, are powerful for either good or harm, and must, therefore, be either indicated or contra-indicated. In the language of another, the physician 'should be content with doing nothing, when ignorant how to do good.'"

Dr. Bennett, in his chapter on "Our present means of Treatment," writes as follows: "The recent advances in diagnosis and pathology have not failed to suggest to medical men the reasonableness or unreasonableness of former modes of treatment; for when the principles which guided our predecessors were shown to be incorrect, there was every reason to suppose that their practice was incorrect also. Accordingly, modern experience has demonstrated that many of those rules for treating various disorders which were almost universally sanctioned by the profession twenty years ago, are not applicable, and that the properties ascribed by tradition to numerous drugs are, in not a few cases, *fabulous*. It has been previously stated, that of all the means of cure at our command, a regulation of the quantity and the quality of the diet is by far the most powerful. So little, however, has this fact been considered, that, generally speaking, food has been too little regarded as a remedial agent. In many histories of diseases, and in most of our recorded cases, no notice, whatever, is taken of the diet, all the improvement being ascribed to the drugs administered. There can be no question, however, that there are many diseases that require nothing more than a properly regulated diet to secure their removal."

Dr. Reynolds says: "It must be obvious to the most superficial observer that therapeutics has undergone great and important changes; that the mode of treatment now adopted is just the *opposite* of that which was in vogue a generation ago, and which lingers yet *even* in the recent editions of standard books, although their authors have long since ceased to follow the directions which they still give to others."

I will finish the subject of blood-letting, by quoting the great French father of medicine, Trousseau, on apoplexy, a disease in which it has generally been thought that blood-letting was especially indicated, and in which it was reputed a most valuable remedial agent. He says: "If I do not have recourse to blood-letting, purgatives, or revulsives in cerebral hæmorrhage, whether considerable or not, it is because experience has taught me that the patients do better without them. For when I reflect on what happens then, I do not see how those matters of treatment can be of any use, since the hæmorrhage is an accomplished fact when we are called upon to note its symptoms. What influence, I ask, can be exerted on a foreign body in the shape of extravasated blood, by letting out blood from a vein of the arm, or of the foot, or from the jugular, or by dividing an artery, by cupping, or leeching? Of what use are purgatives or revulsives? It is said that blood-letting, and that purgatives, a kind of serous bleeding, empty the vessels, and thus facilitate absorption of the extravasated blood; that they antagonize the cerebral congestion, which, according to the practitioners who recommended them, precedes, accompanies, or follows, at the least, the extravasation of blood, and by thus preventing an exaggerated flow of liquid, they diminish the risks of the effusion becoming more considerable, or occurring a second time. With regard to the first point, we may well doubt whether any difference obtains between cerebral hæmorrhages and other hæmorrhages, and, to take a very simple example, whether any difference exists between what takes place in cases of extravasation of blood into the cerebral substance, and extravasation under the skin. In the latter case, has general or local blood-letting ever been seen to facilitate the absorption of the effused blood? As to the second point, namely, that blood-letting is imperatively required with a view of arresting the molimen hæmorrhagicum, which caused the first symptoms, and might cause them a second time, it is indeed very doubtful. The part played by congestion seems to me to have been very much exaggerated, and although a great many practitioners believe general or local blood-letting to be so clearly indicated that there need be no hesitation in having recourse to it, I do not think that the necessity, nay more, the usefulness of the measure, has been clearly proved."

My own experience in blood-letting in apoplexy, since 1856, consists of four cases. They were selected as peculiarly fit cases for bleeding; my general practice was not to bleed. Three of these cases died without any symptoms of the disease being alleviated by the operation; one got well. Whether he would have recovered without bleeding is an open question.

A few years ago the different preparations of mercury were considered the sheet-anchors to check up almost every disease. The conservative physicians now use mercury cautiously, and never give it when they can get on just as well without it. It enjoys a great reputation in hepatic diseases. The liver is the most convenient organ in the body for an incompetent physician. Whenever a malady is beyond his power of diagnosis, he fixes it on the liver, and proceeds to throw this powerful medicine, about which he knows *little*, into a body about which he knows less. "The great rule of the antiphlogistics was, when in doubt, give calomel. Let us look at the exact effects of calomel on the blood. The patient gets rapidly thin during its use, the blood is decomposed, the red corpuscles are quickly destroyed to the extent of one-sixth or more, the fibrin is diminished by one-third its amount, the albumen by one-seventh, and at the same time it may become loaded with a fetid matter, the product of decomposition. Thus, it is an agent of terrible activity, and we may well be cautious how we handle it." Any physician who is fond of giving this mineral poison, should keep, hung up in his office, a photograph of the skeleton of that salivated dog which Dr. Bennett has had engraved in his "Practice of Medicine," for the benefit of his readers.

Syphilis was the disease in which the mercurialists claimed that this drug was almost if not quite a specific. Its wonderful effects were more apparent in this malady than in any other; and yet there have recently been made in Europe experiments in over eighty thousand cases of syphilis, and the result has been that more cases can be cured, and are less subject to a relapse, without using this poison than by giving it.

One great objection to giving mercury is, that those who use it, and believe in its great reputed virtues, are apt to neglect prescribing proper nourishment, and generally ignore other valuable remedial agents; their whole faith and hope being dependent on it, and it alone.

Centuries ago, when the genius of medicine was in its babyhood, but was making rapid strides, and fast growing to be a science, it saw that vague spectre of the medical mind—*inflammation*—standing in its path! Terrified by this creation of the imagination, it fled from the straight road it was pursuing, and groped its way for centuries blindly through the dark forests, and over the flinty rocks, or through the yielding mud of the morass. But within the last twenty years it has been taken by the hand by some of its followers, whose names mankind ought always to remember with gratitude, and it has been brought back again into the right road. It has been placed face to face with the terrible phantom that frightened it, and that "baseless fabric of a vision" is fading away. All those undefined and dangerous ideas, as—"the blood requires thinning"—"there is too great a rush of blood to this or that organ"—"that a portion of it must be taken away, either directly or indirectly, in order that there may not be enough left to keep up the extra supply to the seat of inflammation"—are fast becoming obsolete. Until very recently our profession has been treating all acute, and the majority of other diseases, as if all the ills the flesh is heir to were caused by a hyperæmic condition, or some morbid chemical change taking place in the blood itself. If their theory is correct, as most diseases have a certain known duration, they could all easily be cured by letting out this morbific, contaminated blood through a vein, and steadily pumping in pure, fresh blood from a healthy man, by transfusion, until the malady should have reached the end of its allotted time. But it has been proved that neither the blood, nor the blood-vessels themselves, are the fountain-head of disease; the morbid action begins in the nerves and tissues outside the vessels, or in the blood-forming or blood-eliminating organs, or in the "ultimate molecules of the textures that attract and select materials from the blood, or some "modification of this power whereby the attractive property is augmented, and the selective one diminished."

I can give a tolerably correct idea of the old practice of medicine in a few words, and by one illustration. It will be acknowledged that the tendency of all, or nearly all diseases, is to weaken the patient. Well, since the days of Cullen, physicians have been trying to cure the patient by weakening him still more, by blood-letting, drastic cathartics, antiphlogistics, and low diet. Rational and conservative medicine leaves all the weakening process to be done by the disease,

and exerts all its energies to keep up the strength of the patient, instead of breaking it down.

The antiphlogistic physician reminds me of a man who was brought up before a magistrate, charged with being concerned in a riot. In his defence he said that he was trying to keep every one quiet. On being questioned more closely as to his method of accomplishing so desirable a result, he replied that he was only knocking down those who were trying to get up. The comparative merits of different systems of treatment must at last be fixed by carefully collected and accurate statistics. I will give a few of them in acute pneumonia, a disease in which bleeding, calomel, and low diet have been considered almost indispensable:

ANTIPHLOGISTIC TREATMENT OF PNEUMONIA.

No. Cases.		Deaths.
103	Royal Infirmary E.....	1 in 3
78	La Charité.....	1 in 3 1-7
28	La Pitié.....	1 in 7¼
232	M. Grisolle	1 in 6⅓
85	Dietl.....	1 in 5
354	Von Wahl	1 in 4⅔

HOMŒOPATHIC TREATMENT.

No. Cases.		Deaths,
	Homœopathic Hospital of Vienna.....	1 in 13⅓

CONSERVATIVE TREATMENT OF PNEUMONIA.

No. Cases.		Deaths.
	Royal Infirmary E, (treated by Dr. John Hughes Bennett).....	1 in 32½
105	Uncomplicated cases (treated by Dr. Bennett).	0 in 105

It is well worth noticing that, though the antiphlogistic physicians were accustomed to turn up their allopathic noses at homœopathy, its success in treating this disease seems to have been greater than their own.

In 1856 I became a devoted follower of the great doctrine of conservative medicine, then almost in its infancy in this country. Had I graduated ten years before that period, my mind would, most probably, have been prejudiced in favor of the old medical heresies. If this had been the case, I firmly believe that many a man who is now living in health and happiness, would have been long ago a resident of that country "from whose bourne no traveler returns."

CASE OF EPILEPTIFORM CONVULSIONS ARRESTED BY CHLOROFORM INHALATION.

By J. PHILPOT WEBB, M. D.

Licentiate of the Royal College of Physicians of Edinburgh, etc., etc.

History.—Fred'k J., a boy now nearly fifteen years of age, was seized about eighteen months ago with pain in the right side of the face and head; he lost consciousness and had severe convulsive movements, which were repeated several times, with intervals of consciousness and complete freedom from spasms.

Since that time he has had two attacks, or fits, or convulsions, but of such diminished severity that, according to the mother's account, "you could scarcely say that he worked at all in them the last time." His health in the mean time has been good, and there is nothing remarkable in the boy's appearance.

Present Illness.—1868, Sept. 12th.—About three o'clock P. M., this day, I was called to see him.

Previously to my arrival he had pain in the right eye, and that side of the face and head had passed into a state of unconsciousness.

I found him lying on his back in bed unconscious, with a quick, strong pulse and increased action in the vessels of the head and neck, but without spasms of any sort.

I immediately applied leeches to the temples, gave a turpentine enema, put his feet and legs into a mustard bath, and afterwards had mustard poultices applied to the calves of his legs, with iced cloths to his head.

I also placed about five grains of calomel on his tongue, and was in hopes he might escape the convulsions this time.

Soon, however, spasmodic twitchings of the muscles of the face made their appearance, which gradually became so strong as to draw the mouth and lower part of the face to that side, and the whole of the *right side* of the body. Arm, trunk, and lower extremity became involved in general convulsions of great severity, which lasted for about five minutes, and gradually subsided.

As the leech bites were now bleeding very freely, and the enema had acted well upon the bowels, and the stomach had discharged its contents by vomiting, I was in hopes he might not have another attack. In a few minutes, however, the convulsions were repeated, and continued to recur, one fit succeeding another with alarming rapidity and increasing severity.

I now determined to place the boy under the influence of chloroform in the usual way of inhalation, and cautiously applied it to his nostrils on a folded handkerchief. The effect was almost magical.

The first and only indication of the presence of the anæsthetic in the system was the sudden and simultaneous cessation of a frightful fit of convulsions, which was at this moment at its height.

I immediately withdrew the chloroform, and secured a good current of air over his face, by fanning him in a situation between two open windows.

From the moment the convulsions ceased suddenly, the boy lay in a tranquil sleep, with easy natural breathing and quiet steady pulse. After about fifteen or twenty minutes he awoke, showed signs of restlessness, wanting to sit up in the bed, tossing about his limbs, etc. In less than a minute he again settled down into a comfortable sleep, which continued far into the night—the leech bites being allowed to bleed all the time—and he awoke well. Next morning he only complained of slight headache, with soreness in his limbs, which passed off in the course of the day.

In this case from first to last the boy remained perfectly insensible—unlike his former attacks, in which he always recovered consciousness betweeen the paroxysms.

Nevada City, Cal., Sept. 17, 1868.

ON SOME VERY MINUTE, CAUDATE, MOTILE CORPUSCLES IN VACCINE VIRUS.

By JOHN VANSANT, M.D., San Francisco.
Late Surgeon and Brev't Lt. Col. U. S. A.

If a small fragment of the ordinary, dried, vaccine virus, from the arm of a child, be wet with a drop of water on a slip of glass, and the two carefully mingled with the point of a knife until the virus seems to be dissolved, and then the mixture, covered by a good piece of thin glass, be submitted to microscopic observation, with a magnifying power not less than one thousand times linear, the following can be seen: Great numbers of exceedingly minute bodies moving with tolerable swiftness across the field of vision, and, at the same time, showing a rapid and continuous oscillation, or vibratory movement of themselves. Most of these bodies will, at first view, appear globular, though some will be seen elongated, resembling a narrow vibrating line, five or six times longer than wide.

If, now, a single specimen, say of the globular kind, be selected and watched more carefully (and better with a power of 1,500 diameters), it will seem to be composed of a mass of colorless, transparent, highly-refractive, gelatinous matter, or *sarcode*, measuring usually about one 30,000th of an inch in diameter. This little body will also be seen not to be round, but to assume various amœba-like shapes, protruding from different parts short finger-shaped projections of its plastic self, which keep up an incessant motion. These protruded parts are rarely from more than two directions at the same time, giving to the corpuscle then an oat shape; and, generally, they are in but one direction, though this is often changed, the protrusion being withdrawn from one side of the body as it is forced out at another. Occasionally one of these corpuscles is seen permanently and distinctly caudated, a sort of tail several times the diameter of the body, or head, in length, extending from one side of the latter, and keeping up a rapid vibration. The corpuscles in this state bear a striking resemblance to a small spermatozoon (though the tails of the former are rather shorter and more obtuse), and are best seen when the preparation is nearly or quite dry between the glasses. On account of the excessive minuteness and transparency of these bodies, I have not been able entirely to satisfy myself whether or not they all possess this tail, which might easily be invisible when slightly out of focus, or curled around underneath, supposing it to exist.

When one of the oscillating, line-like bodies above alluded to is next closely observed, it will be seen, besides moving quickly from side to side, and bending itself with a kind of undulating motion, sometimes to cause to appear at one end of its narrow body an enlargement like a head, which, after a few moments, may vanish, to be succeeded by the same globular appearance at the opposite end of the line; or even, for an instant, the whole may be converted into a ball. The head, I think, finally remains fixed at one end. The usual dimensions of one of these elongated corpuscles is about one 5,000th of an inch long by one 30,000th wide, the head being one 15,000th; they, however, vary somewhat in size, and I have measured a dried specimen one 2,000th of an inch long, with a head one 8,000th in diameter.

In the field of the microscope, in addition to the corpuscles mentioned, a number of bodies are floating, having almost precisely the appearance of the separated heads and tails of very small spermatozoa; and, now and then, a somewhat triangular cell, or an irregularly tangled body, is seen, just like those often found in semen.

These corpuscles are so exceedingly small that they cannot be demonstrated by lenses capable of showing blood corpuscles and spermatozoa with distinctness. With a magnifying power of 280 diameters, they can barely be discerned as the most minute and indistinct points; with 750 diameters they are still very undefined; and with 1,000 diameters, a good light, and careful focalizing, they must be regarded with strict attention to see the particular changes herein described. Under a power of 1,400 or 1,500 diameters these changes of form are much more easily observed.

When such almost infinitesimal portions of living, active matter are viewed under the higher powers of the microscope, and their enlarged images so plainly seen, a little effort of the mind is required in order to form, by comparison, a just idea of their real size. For example, the head of a common pin measures rather more than one-fifteenth of an inch in diameter; these corpuscles average one 30,000th of an inch; therefore, about 4,000,000 could lie on the head of a pin; and, to form a cubical mass with a diameter equal to that of a pinhead, 8,000,000,000 would be required. Again, the eye of a fine sewing needle measures about one 100th of an inch across; hence, 90,000 of these corpuscles might swim abreast through the eye of such a needle. Or, to make comparison with a thing so minute as a blood corpuscle, which is, say, one 3,000th of an inch in diameter, we find that about 100 of these virus corpuscles would be required to form a single layer across the interior of a blood disc.

Now, if the corpuscles under consideration have such minuteness when distended by water, their size and weight must be much decreased by desiccation, and one can easily conceive of particles of contagion no smaller than these being wafted to great distances through the atmosphere, or conveyed as *fomites* by clothing. Moreover, from this point of view, a ray of light seems shed on the obscure subject of the *rationale* of the protective influence of vaccination, or of a single attack of the non-recurrent contagious diseases; for it is quite possible to imagine the rapid increase of these contagious corpuscles in the circulating fluid, and the actual inoculation of every blood disc, thereby impressing on it and its progeny a new quality; and, as all the tissues and organs are nourished by the blood, this new quality would come at last to be impressed upon the whole animal system, and perpetuated for a greater or less length of time, according to the affinity of the poison for the blood discs, and the amount of the primary action, though all the original virus corpuscles, as such, might have been eliminated by secretion at the period of recovery from the disease.

Since writing the foregoing, I have been kindly furnished, by Dr. E. Malcolm Morse, of this city, with a specimen of dried vaccine virus direct from the cow. This, when treated like that from the child, exhibited the same kind of corpuscles as above described, but they were *much more vigorous in their movements*, and a trifle larger. This virus, also, contained considerable numbers of light greenish-yellow, discoid bodies or cells, sometimes perfectly transparent, but oftener filled with the small amœba-like corpuscles spoken of in this paper. These corpuscles could be seen escaping from all sides of the *mother cell*, and in rapid motion in its interior. The discoid bodies measured, when transparent and without visible nucleus, about one 7,000th of an inch in diameter; when filled with nuclei, or virus corpuscles, from one 6,000th to one 5,000th of an inch.

We append to the foregoing valuable article of Dr. Vansant, an account of the researches of Dr. Farr on the molecular form of living matter which he found in vaccine lymph:

"This contains a limpid, albuminous, saline fluid, leucocytes, and a multitude of molecules, which M. Chaveau calls 'elementary granulations,' and which I call *vaccinads*. Like the particles of tannate of iron coloring ink, they are never completely deposited in the lower strata of the lymph, and they pass through all kinds of filters. By decantation the leucocytes can be separated from the plasma, while the residue retains all the lymph's activity. The albuminous liquor, with its salts, withdrawn by absorption into an upper layer of distilled water, standing on the lymph forty-eight hours, leaves granules at the bottom. Experiments were made with the two liquors on children, on horses and on heifers. (1) No effects were produced by the albuminous liquor. (2) The granular fluid produced the full effects of vaccine lymph, *vaccinine*.

"This was the first result of M. Chaveau's researches. In a subsequent series of experiments he tried the effect of pure and of diluted vaccine lymph. First, he tested the pure lymph by vaccinating successfully a certain number of patients, and then found that the lymph diluted in from two to fifteen times its quantity of water took effect in nearly every puncture. This proved that water did not destroy the granules, and that the number was not so great that 10 milligrams of the fluid, for instance, were so diffused in 150 milligrams, that every milligram of the solution on the lancet-point contained vaccine granules enough to insure their propagation in children and animals. Diluted in fifty times the volume of water, the solution rarely took effect; when it did take effect the pustule was pure and unmodified. With a dilution in 150 times its volume of water, M. Chaveau succeeded once. He then diluted 8 milligrams of lymph with 3200 volumes of water, and failed with this dilution to produce the disease after many trials; but, reasoning on the matter, he inferred that, as the failure was probably due to his missing the floating vaccine granules (*vaccinads*), they being still present, he should get the usual result by injecting the whole of the dilution into the veins of a horse. He tried the experiment and produced one of the finest specimens of horse-pox.

"We can reason still further upon these experiments. As the eight milligrams of lymph were distributed through 3200 milligrams of water, then the chance of taking up on the point of a lancet granules enough to take effect would be inconsiderable. But if the whole of the 3208 milligrams of the fluid were inserted in the arms of 3208 persons, it is certain that the great majority would escape, and it is pretty nearly as certain, as the matter of all the granules would be present and would be inserted, that one, two, or more of the vaccinations would take effect. To fix our ideas, divide the water into eight portions, each of 401 milligrams, and let the *one* milligram of lymph remain fixed in the midst of 400 parts of water. Then if a milligram of fluid is inserted in the arm of each person only one can be attacked, while the 400 escape; and so it might be in the rest of the eight groups exposed to the chance of infection.

"3200 children could be produced in succession as persons who had been all vaccinated with the water in question without effect; and according to the common fallacy, it would be asserted that the water was pure and stainless. The positive infection of one individual would be set aside by the preponderance of 400 over *one*.

"By the logical method, as the proportions vaccinated with effect are by hypothesis eight in 3208, while in other series of cases, where pure or less infected water is employed, *none* or *one* or *two* in 3208 are attacked, it is inferred that the vaccine granules diffused in the water were the probable cause of the eight vaccine pustules.

"But this is an understatement of the case, for the granules would be distributed irregularly through the water, and thousands of negative instances might occur in succession without invalidating the induction.

"Our excellent English microscopist Beale had, before Chaveau, declared that the 'active properties of vaccine lymph are entirely and solely due' to these corpuscles. He has figured them, and says that, under very high magnifying powers, they are seen as multitudes of very minute particles exhibiting most active molecular movements.—*London Med. Gazette, August.*

HYGIENE AS REGARDS THE SEWAGE OF SAN FRANCISCO.

By ARTHUR B. STOUT, M.D.

Editors California Medical Gazette:—I propose, with your assent, to devote a few articles to the discussion, in your journal, of the important question of the system of sewage now in use in this city. The defects of this system are an active cause of disease. The foul emanations from the sewers carry many a strong man, many a fair woman, in the bloom of health, and still a larger proportion of young children, to a premature grave. Even though the injury to health were less destructive, the offense which smells so rank, forcing all who walk upon the streets to inhale the sickening gases of such pestilent putrefaction, is an insult to civilized humanity. Such an offense would justly revert upon the municipal government, if tolerated after the remedy shall have been suggested.

While all minds have been alarmed from the fear of cholera; while sanitary measures are loudly called for, to clear away superficial nuisances, of very secondary consequence; while pamphlets are published and nostrums invented to cure the cholera; while quarantine exactions are proposed, to arrest the march of the dreaded pest from Asia, *via* Panama, or China; while the city's estimable health officer is hurrying from street to street to combat selfish and reckless landlords or tenants, recommending new sewers *ad infinitum*, and regardless of cost, there are few who perceive that the most fertile source of cholera, malarious and epidemic fevers, small-pox inclusive, and scores of contingent diseases, is to be found in the mismanagement of the sewage of the city.

There is little need to look to Asia for our cholera; we have an efficient and active manufactory of the article in our very midst; and every new sewer built under bad regulation goes to "pile on the agony steeper."

A thoroughly organized system of sewage is indispensable to all large cities. Previous to the adoption of a process of drainage, at enormous expense, in Paris and London, the ratio of mortality by endemic typhus and typhoid fevers was vastly greater than that of the present report. By the construction of those immense works, public sanitary institutions have required less outlay, and countless citizens have been spared the expenses and losses incident to sickness, as well as the pain of death. If such statistics could be calculated, it would appear that tax-payers would realize a great economy, irrespective of the comfort of pure air to breathe, by maintaining a perfect sewage, no matter how great the cost of construction. It is, however, more requisite in the conduct of such a system, to observe a perfect discipline in its daily working, than in its primary construction. In vain may engineers construct the mechanism, if afterwards the trustees neglect and mismanage. Herein it is that the authorities sin. Were even the sewers we have properly cared for, a city of only seventeen years'

existence, daily ventilated with the pure air from the ocean, would not resemble, in its noxious effluvia, such old and crowded cities as Paris and London, before their sewage system was introduced. Be this as it may, we have before us, in London and in Paris, the lesson of the almost incredible expense incurred by the neglect of due precautions to protect health in earlier years. Let us then accept the costly hint, and establish the best system which can be devised, while yet the city is young and small. Already the grievance of narrow streets is calling for and receiving reform. Let underground and street improvements, which concern the general welfare, progress *pari passu*, in equal movement with the admirable improvements of private enterprise. What will avail your elegant super-structures, if the underworks and foundations are unhealthy and unsound. The malarious exhalations which generate endemic maladies, as they exist in San Francisco, by their continuousness, their insidious gnawing into the life source of health, or in other terms, by tainting through weakly poisoned air the atmosphere which enters the lungs for human respiration, hurry on to early graves more individuals in two years than would an invasion of Asiatic Cholera, with its demoralizing influences, in as many months. The action is slower, and from the apathy which slowness begets, still more certain in its deadly influence.

In order to estimate justly, not the merits but the demerits of the sewage, as now conducted, it is desirable to explain the present system; then criticise its working; and finally, indicate the remedy.

Through all the principal streets, large brick sewers are constructed, measuring 3 ft. by 2 ft. inside measurement, and 1 foot in thickness. These sewers descend to the bay, with a dip as favorable as the lay of the land and the grade of the streets will permit. This dip, however, in the low portions of the city, is very slight, and in some places quite insufficient for quick drainage. Along these sewers, at certain intervals, large openings, or man holes, are built, to permit men to enter and clean out the accumulated mud and ordure. At the corners of the streets other openings, called traps, are constructed, that surface water, rain and street washings may enter. These traps are ingeniously built, with a central partition to form a water valve, which prevents air in the main sewers from escaping in the streets, while the street water may enter freely into the sewers. The action of these water valves is excellent while the traps are kept in order. When filth accumulates, however, the water is driven out of the valve, and a putrefactive mass is gathered in the bottom of the trap, through which the gases in the sewer can permeate, and infect the streets. To free the traps when they become clogged, men are employed to shovel out this putrid mud, as may be frequently seen at the street corners. Large piles of this mud, which the sewers are constructed to carry off, never to be seen again, nor smelt, after once entering them, are strewn upon the street for hours, disseminating putridity and disease, until other men with carts shovel it up again into their vehicles; thus, by dividing it up, giving it a thorough ventilation, as though to sanify it, and again whirling its noxious effluvia into the air, and the noses of the faithful tax-payers, who pay so dearly and yet so cheerfully for the epicurean privilege. Aye, the open cart carries away the mud, scattering far and wide its baleful aroma; the nose absorbs the flying pestilence; and by and by another vehicle solemnly removes a victim of a wretched and pernicious system.

All the sewers, as thus described, are intended to empty their contents into the bay along the wharves at North Beach, in Mission creek, in Islais creek, at South Beach, and so on, as the natural inclines of the soil permit. Does the result fulfil the intention? We will presently show.

To deprecate that which exists when no improvement is offered, may be considered unworthy; but if the propositions advanced are not fairly sustained, then let us receive the punishment due to our temerity. Having thus given a general idea of the present system of sewage, its defects will soon appear.

Of what avail are these vast brick canals under the city? Their immense cost is already realized by land owners, and can be rendered only more apparent by statistics. During the months of drouth very little water, but the waste of the water companies and the washings of houses, enter. This quantity is insufficient to wash away the accumulations. It is still worse in the traps, which are quickly clogged, and which, without a constant supply of water to form the water valve, become outlets for effluvia throughout the city. Were it not for the winds from the ocean, this fault in the sewage would render the air insupportable. At night, when the atmosphere is at rest, the odors from the street corners are still more perceptible. The insufficiency of water in the main sewers permits their contents to mingle with sand which enters them, and form a thick paste, which moves sluggishly forward, or is entirely detained. Thus putrefaction has ample time to generate foul gases. These, of course, occupy the upper portion of these large canals, which conduct them most effectually throughout the city. As the water flows downward, the counter current of gas receives a pressure which forces it rapidly upward. An exit it must and will have; return it cannot, and consequently it finds its way through the lateral pipes and drains into the houses. It rises to the highest elevations of the sewers; and in that manner the high lands, which are selected for their healthfulness and freedom from malaria, become as much infected as the low grounds of the city. In every residence where the lateral sewers are neglected, or unprovided with traps or water valves, the noxious odor penetrates, often to a degree to produce nausea and vomiting to the occupants of basements. This is the fruitful source of fevers, putrid sore throats, and many eruptive diseases. Were the main sewers provided in all seasons with an ample supply of water, their accumulations would be rapidly washed to the bay, and putrefaction have no time to establish itself. At no time are these vast sewers more than one-third occupied by sewage, seldom as much; the remaining two-thirds is filled with the gaseous products of putrefaction. We have shown that these would be greatly diminished if the sewage matter were carried off faster; but being produced they would be rapidly forced out of the way, if two-thirds the calibre of the sewer were not provided for their accommodation.

The only apparent reason for these immense subterranean channels is to allow men to enter and clean them; but a rapid stream of water obviates this necessity.

The outlets of the sewers are often uncovered at low tide, and the discharge from them spreads far and wide on the shore, exposed for several hours to the sun, while awaiting the flood-tide to wash them away. Thus is created a new source of infection. The air in the sewers being warmer than the external atmosphere, ascends the sewer, while the air from without follows. The gases, therefore, receive another impulse besides that already mentioned, and are injected through the side pipes into houses and the elevated portions of the city. Happily for us, then the sea breeze comes to our aid and fills the *role* of scavenger.

Imagine every street of this widely expanding city channeled beneath with brick cylinders two-thirds of whose area is filled with blood-poisoning effluvia, which circulate under

pressure, and find egress into the atmosphere through every orifice, every leak, and every pore. A foot thick wall of brick and cement does not restrain them. Out they must, and if no outlet is given they will permeate the wall and transpire through the soil. These cylinders act like retorts and generate the vile gas from their own obnoxious contents. Imagine then this vast distillery of pestilence seething its vapors beneath your soil, beneath your houses, beneath your beds, evolving them day and night without intermission, intoxicating every breath you inspire with a fractional dose of poison. You will begin now to comprehend why a sudden congestive chill has destroyed in an hour or a day some young and beautiful woman in the joy and bloom of life. You will perceive why some hale, strong man, who has received some injury from which his natural strength would enable him easily to recover, is suddenly seized with rigors or chills, followed with a raging fever, and perhaps erysipelas, and in a few days dies, or is rescued with difficulty. Again, you will understand why little children of unexceptionable parentage, in the perfection of health, clothed with perfect propriety, nourished in the best manner with the most careful choice of food, are suddenly seized, perhaps in the night, with croups, with inflamed throats, with convulsions, and in a day or two are borne to the cemetery. Why should such children, with perfectly normal constitutions, enjoying without stint a wisely directed physical education, defeat the law of nature and prematurely die? It is because a poison has been inhaled into their blood through the lungs, which has slowly and insidiously intoxicated the vital fluids and the brain, until the system becomes fairly saturated, and then follows the sudden explosion of disease, and rapid death. The vital fluids have become altered by a contamination which parental solicitude has neither perceived nor understood, until death's climax is at hand, and medical skill, however rationally applied, has no time to alter the fiat. The other minor causes of children's disorders are incompetent to work such havoc in so short a period.

The assertion is not advanced that all such occurrences depend upon the sewers. This peninsula was subject to malarious diseases before those indispensable canals were laid. But natural miasms of the soil bear no ratio to those artificially engendered and propagated by a badly organized sewage. Hence is the increase of mortality in a greater ratio than the natural increase of population. As we sow we may expect to reap; but it is discouraging to be answered, when we venture to boast that the improvements in medical science have increased the average length of human life, that the mortality record proves the reverse. Of what avail are improved surgery and more enlightened medicine, when another enemy, of man's own creation, enters the field to make impotent our skill.

The construction of these immense canals, called sewers, is conducted according to a statute or arbitrary ordinance, which leaves to the Street Commissioner very little room to exercise his own discretion. The ordinance is inexorable, and sewers are laid in small streets of the same dimensions as in large ones. There are alleys whose perfect sewage could be obtained with twelve or eighteen-inch pipes, and oftentimes by dipping from the center of the block both ways to the adjoining streets, might be placed nearer the surface. The diminution of time and expense must be apparent. But no; a great putrid gas chimney must be laid, to retain and distil the pestilence.

THE REMEDY.

Costly as may be the remedy of these evils, it has become indispensable to the public safety to seek for and apply some curative process. The public health is the most eloquent appeal to the tax-payer. With the new system to be proposed, the heaviest expense is in the first inauguration; after which we hope to show that a great diminution of the current expenses will follow, and the enormous sum saved in the construction of the sewers will in the end effect a decided economy.

The great remedy for all this distress is water, and the mode of its administration is the cure. Irrigation in abundance, incessant both in summer and in winter, applied under a system of perfect discipline and continual watchfulness, will deluge the nuisance, and wash it to the sea before it can become an instrument of misery and death. Fresh water from the water companies is too scarce and too dear; but salt water in abundance is in the bay, and costs nothing but the trouble of its use.

There are two modes of application: Firstly, to construct reservoirs upon properly chosen elevated places, and with steam-engines pump up the water, and thence distribute it into all the sewers. Pipes may also pass through the sewers, which pipes, supplied at intervals through their course with irrigators, and constantly discharging jets of water, would effectually prevent the formation of accumulations or clots. The reservoirs need not be large nor expensive, for as there is no object to detain the water, but to let it rush off as rapidly as raised to the proper elevation, only small tanks would be required. Or, secondly, the water might be injected directly through pipes supplied with irrigating jets, and running upward in the sewers. The objections to this plan would be the inequality of the pressure on the pipes, and the inconvenience of their bursting in the sewers. The reservoir system secures greater evenness of pressure. Where there is no necessity to maintain large supplies of water, neither the engines nor the reservoirs need be of such great capacity and cost as those used in the hydraulic operations of the city of Philadelphia. If, however, such immense machinery and such vast enterprises are undertaken in Philadelphia and New York to maintain the public health, by supplying pure water for healthful nourishment, why should not San Francisco protect its health by supplying clean water to wash away the causes of pestilence and disease.

The introduction of the water system cures in an instant the evil at the corners of the streets. An irrigator attached to every water valve or trap (water valve in their present condition is surely a misnomer, for they rarely receive any water), immediately cleanses the traps, leaves the water necessary to form the valve, and thus only can prevent the exit of gases. What, now, becomes of your men digging filth from the corners and the man-holes?—the heaps of sewage on the streets?—the open carts fanning the air with noisome stench? They all vanish, *presto*; the irrigator keeps these effluvia where they belong, and the rapidity with which offal is carried to the sea prevents its degeneration by putrefactive decomposition into pestilential vapors.

What would London pay for our facilities for the removal of offal? Elevated grounds for a head of water, every tidal wave giving streams of crystal water from ocean springs, the Golden Gate as discharge-pipe only a few miles off; and yet, those facilities, placed so easily within our reach, are disregarded.

To facilitate this copious irrigation, the aqueducts should be of a size to concentrate the offal, and enable the jets of water to play directly upon it. They should have a pitch, to obtain the greatest possible velocity to the flow of the stream. They should have abundant space for their contents to flow without exerting pressure upon them, and also room for some unavoidable gas; yet there should not be space for the volumes of gas which would be evolved from decomposing matter

detained in the tubes; but as there should be no detention of the sewage, so, also, will there be but little evolution of the gas. Tubes of iron of eighteen-inch caliber would suffice for mains; or if, on trial, Skinner's sewage pipes prove sufficient, they offer advantages over iron or brick. They can be perforated smoothly to admit lateral tubes, and are cheap. Such aqueducts can be laid nearer the surface, and thus where the incline of the land is slight, a better pitch for the pipes be obtained.

Any one who will calculate the difference of cost in this process over the enormous expense of three feet by two feet brick sewers; the time, labor, and street obstruction they cause; will now discover the eventual economy. The new system, by requiring engines and reservoirs, appears to threaten the city with a new debt. It is shown, however, that there is economy in every step.

Another advantage to be derived from using small aqueducts, is the relief immediately given to the low lands where there is little or no pitch, as below Montgomery street, along Mission Creek, and in Hayes' Valley. The terminus of the aqueducts in the bay can always be carried into deep water, below low tide, and thus form a descent. The upper termini of the tubes are always in elevated places. When now the water descends with force, it must drive all the sewage in the horizontal portion of the aqueduct before it, until it meets the last descent into the bay. Again, as the outlet in the bay is always submerged into deep water, there will be no accumulations of black putrescent filth along the shore, nor effluvia to infect the air.

As regards the upper termini of the sewers, an apparatus can be attached to them by which all the gases in the tubes may be rapidly attracted upward and be consumed. By finishing the aqueducts with a horizontal cylinder of iron, which passes through a furnace and terminates in a chimney at right angles to it, a powerful upward current of air will be established, and be burnt as it passes through the heated retort. As the retort merely passes through the furnace, these fires may be made useful for various purposes in the arts.

Another source of income to diminish the expenses of this system may be derived from the reservoirs. These bodies of water can furnish power for turbine wheels, and thus promote many industries which do not need much motive force.

In order to derive the utmost benefit from the reservoirs, and as an extra precaution to prevent the water valves at the street-corners from becoming obstructed, hydrants might be placed at these openings connecting with the main aqueducts.

Every two or three days an inspector should allow the water valves to receive a thorough washing. These hydrants may subserve another purpose—as street sprinklers they may lay the dust. In the event of large fires, the Nicholson and Stowe pavements, saturated with asphaltum, must infallibly burn, and by rendering the streets impassable, increase indefinitely the destruction of property. But if the streets can be flooded with salt water from the hydrants, these costly pavements may be saved. By using this expedient at fires, where the water by reason of its saltness cannot do extra damage, the expense of fresh water from the companies may be diminished.

Having discussed as briefly as the great interest of a subject made up of many details would permit, the question of irrigation and the sewers, as they now exist in the streets, the great home question now arises: the protection of the individual houses, not only from the effects of the retained sewage within themselves, but what is worse, the introduction of the poisonous gases from the main sewers of the streets.

But few observe that while they free themselves, at small cost, of their house and kitchen waters, through wooden canals under their tenements, that they are introducing a worse nuisance than the one they banish. From the very handy construction of these tubes, while they let a little stream of water out, they let a strong current of air in. The water companies and the gas companies watch with scrupulous economy any leaks or defects in their pipes, because every cubic foot of gas or water lost has a specific value; but the gases and waters from the sewers, being rated as of no account, are cared for by nobody. But that they are of immense account to somebody the mortality report is daily proving. The apparatus of sewage should be as much a work of precision as the mechanisms which enter well-conducted gas and water works. And if municipal authorities do not possess the energy, or think it undignified, to establish and incessantly watch such a system, it should be handed over to the tender mercies of a monopoly to profit by it.

Not a house, not a tenement should be unprovided with sewage, properly managed and frequently inspected. There is no longer an apology for neglect. Landlords and tenants have both their health, money, and lives invested in the institution, and are alike responsible for the public safety. Usually the landlord throws the expense on the tenant, while the tenant throws back the shuttlecock upon the landlord, and meanwhile nothing is done. Something *is* done; the public and the press call aloud for better health, and the invalids say: "but doctor, why am I always sick? why does my malady relapse? is there, then, no *permanent* cure?" The profession answer: "No, ladies and gentlemen, because your blood is freshly poisoned every day, and the action of antidotes is not *permanent*.

To counteract, then, as far as may be, the infection of houses, water traps should be made in every conduit from the house to the main sewer. This precaution is easy now, for there are patent, cast-iron garbage boxes, with water valves, which should be placed in every lateral sewer. These apparatuses are exceedingly efficient, and are provided, or should be, with movable galvanized iron filters to separate the solid from the liquid offal. These contrivances are cheap, and everybody should buy them. Unless, however, frequently inspected, they are neglected by reckless people, and the water is allowed to dry out. This is especially liable to happen in untenanted buildings. It is not difficult nor expensive to obviate such accidents by constructing somewhere in every lateral sewer, a wooden box water valve, holding eight or ten gallons of water. Thus, a box is planted in the ground, in some easily accessible place. The sewer pipe from the house enters this near the bottom; the discharge pipe to the main has its outlet near the top of the box; between, of course, a small lake of water is formed, through which the gases from the streets cannot pass. Again, into the upper part of the box introduce the rain gutter from the roof of the house. During seven months of the year the rain thus introduced keeps perfectly washed the water valve. No gases can collect, for the rain pipe conducts them all the year to the upper air. The large quantity of water these boxes contain, constantly changing, prevents their drying out, and is a guard valve which will amply repay its cost. The box should have a tight cover on hinges, to allow the inspector from time to time, once a week, to examine its condition.

The next important thing to look to is the *solid* offal, the vegetable and animal refuse of the kitchen. This should never be permitted to enter the sewer. The filter which separates it from the liquid garbage should be frequently emptied into a close receptacle and be daily removed. This substance is a fertile source of infection. It quickly heats, ferments,

and putrifies. But nobody likes to smell it or to touch it. It is the grand bugbear of careless, indifferent, ignorant people. The more lazy they are to remove it, the better it punishes them when they must lose their sweet scented companion. Yet this substance is invaluable to form a rich fertilizer of the soil. Thousands and tens of thousand of tons of valuable manure are lost.

Let us suppose a perfect system of management. Early every morning the house barrel is emptied, before putrid decomposition begins. It is emptied into closely covered carts; and thus handled, all the horrid odors which we now daily perceive, from filthy, open, disgusting garbage carts, which may be scented a whole block while they stand lazily ventilating themselves on the street, will at once be prevented. The prevention of decomposition prevents infection. Let these vehicles now deposit their contents at some common rendezvous where they are forthwith disinfected, and then converted into poudrette. This method presents another source of income to defray the general cost of sewage.

Will you seek another source of revenue for the same great object? The fire insurance companies pay large bonuses to protect their policies. Their gratuities to the fire department have been great. The marine insurance companies expend immense amounts in salvage, and in ship surveys, to guard their risks. In like manner let the life assurance societies contribute freely to the sewage fund.

Should the registrar of vital statistics separate, if it were in his power, all the deaths caused by malarious infection from the mortality roll, and suppress, if it were possible, this cause of disease, the decline in the record of death, and the consequent increase in the average duration of life would astonish the actuaries of life insurance companies, and amaze the general observer. It is to the interest of every individual to be able to obtain life assurance at a low premium. Surely then a city which diminishes, by its sanitary precautions, the ratio of deaths, should enjoy the privilege of a lower rate of premiums than another, which neglects the principles of hygiene.

The discussion of this subject is by no means exhausted; but to conclude, for the present, the hope is entertained that the vital importance of applying a radical remedy to the evil as it now exists, and which cannot fail to injure the character of the city for healthfulness, to divert the immigrant from the settlement he otherwise would be disposed to make, and even induce families to break up their homesteads, will induce the proper anthorities to give it the study it merits.

The inauguration of such a system calls for a special department in the Engineer's Bureau of the city. The work is beyond the competency of a Street Commissioner elected by popular caprice. An engineer's department, endowed with power, and supplied with faithful assistants and deputies, possessed also of ample funds, is far more capable to conduct a system comprising elaborate details and cultivated knowledge in a great variety of the departments of science.

A Cure for Head Ache.—Under this title, Dr. Kennion publishes a note in the *British Medical Journal* (June 13th), in which he states that he has found the vapor of bisulphide of carbon a specific for headache of all kinds. About two drachms of the solution are poured upon a piece of cotton wool, which is inserted in a phial. The mouth of the phial is then *closely* applied to the temple, or behind the ear, till considerable smarting is produced. The effect is equally marvelous and immediate!

California Medical Gazette.

SAN FRANCISCO, OCTOBER, 1868.

☞ *All letters and communications to be addressed to the* "Editor California Medical Gazette," care of A. Roman & Co., San Francisco.

THE YELLOW FLAG.

We presume the object of the yellow flag was to warn people away from the locality in which it was exhibited, and in this way check the progress of variola. We cannot remember the author or authors of the yellow flag, and we have tried in vain to discover what line of thought or argument was pursued to arrive at such a comprehensive and enlightened scheme of public safety. The press, at the time it first made its appearance, was disposed to regard it in a favorable light; but it seemed to us then, as it seems to us now, a perfect farce, and the glare of its novelty alone must explain why it was adopted by the Board of Health of our city. We are sorry they remained so long satisfied with a measure objectionable in many respects, but chiefly so from its utter inability to realize the object for which it was instituted.

The yellow flag has been flaunting in our faces for many weeks, and yet we know that the small-pox, after experiencing a temporary lull, resumed its march with increased virulence, visiting every portion of the city, filling the public mind with terror, and swelling to a marked and alarming extent our mortality lists.

If the yellow flag actually possessed the power of isolating the houses, where it was exhibited, it might then be entitled to some consideration; but as, in a city, such houses are necessarily in close proximity to other houses, and in many instances on the great thoroughfares of trade, through which people must pass in spite of yellow flags, to transact business, the possibility of isolation under such circumstances cannot for a moment be entertained.

Failing to isolate, failing to warn, the yellow flag appears to us an institution neither useful nor ornamental—the poorest apology for a measure of public safety it has ever been our misfortune to encounter.

We have had in our city, and shall, in all human probability, have again, epidemics of scarlet fever almost as malignant as the present variola. The science of medicine has settled the question that the contagious principle in variola and in scarlatina is about equal in virulency; but variola has this advantage over scarlatina: the genius of Jenner has given to man a slight improvement on the yellow flag—the means of checking at once and blotting out this

distemper. Against the other there is no protection, except in taking the disease whose primary lesions are so frightful, whose sequelæ are so dangerous, obstinate, and perplexing. We have never heard of a flag for scarlet fever, and we hope it may never enter the minds of those to whom the public health is entrusted to make any such absurd suggestion.

It is our solemn conviction that this yellow flag, far from being actually serviceable, has been, in an indirect way, productive of very mischievous and fatal consequences. For weeks after its suggestion and adoption, the public seemed lulled into the belief that there was some mysterious charm about it, which would protect them, check the distemper and prevent its return. It seemed perfectly satisfied when it heard there was a little yellow flag flying out in the suburbs; and indeed the Board of Health seemed blessed with the same sense of comfortable safety, if we are to judge by the perfectly satisfied air with which it viewed its flags—"only this and nothing more." In this false feeling of security many weeks elapsed, the epidemic was gaining strength and spreading; measures of vital importance were neglected; by a most lamentable and singular oversight, the only means we actually possess of checking this distemper were not put in force until a few days ago, when private vaccination and the labors at the Health Office had done all that was done up to that moment to check the spread of this malignant visitation.

There were some enactments in force in reference to the vaccination of infants, before this scourge came upon us, but no measure looking to a general vaccination or revaccination of young and old was proposed until very lately, and we are inclined to believe that but for the fresh outbreak of variola, the city would never have heard of public vaccinators.

Towards the close of the year 1866, or early in 1867, there was introduced into the House of Commons of England, by Lord Robert Montague, the bill called the "Vaccination Act," which received the Royal assent in the month of August, 1867. This bill is clear, comprehensive, and exhaustive—within the reach of any one, who felt the slightest interest in such questions. Had the statutes of this bill been studied and put in force three months ago in this city, instead of the Yellow Flag absurdity, we should long since have been relieved of the presence of this pestilence which is still killing so many of our citizens, and making the country afraid to come down to the town.

From the Health Office we learn that 191 cases were reported for September, and of these 71 died—23 in the Small-pox Hospital, and 58 throughout the city generally, showing the deaths were nearly 40 per cent. of the number attacked.

The extraordinary virulence of this epidemic can best be illustrated by comparing its history with the records of the London Small-pox Hospital for 1867. During that year the number of cases admitted was 1,626, and the nuber of deaths was only 206, being in the proportion of 12 per cent. of the admissions.

How long this epidemic, so destructive in its character, will remain in our midst, is a problem whose solution will be found in the fidelity with which the public vaccinators correspond to the intention of their appointment—in the earnestness with which physicians impress upon their patients the great necessity for vaccination—in the care and zeal with which private vaccination is generally conducted. Over no other disease in the whole range of morbid processes does the profession possess such a controlling influence; and taking into consideration its danger, filth, and horror, and the facility with which it is arrested, when we fail in our manifest duty here, we become the worst of criminals. A full and conscientious discharge of our duty, assisted by the public vaccinators, will drive the scourge promptly from our city, leaving behind the lesson which should never be forgotten, that on the discovery of Jenner we must rely alone for safety in the presence of the pestilence, and not on "the Yellow Flag," or similar absurdities.

NOTES OF THE MONTH.

THE NECESSITY OF DISINFECTION.

We would suggest to the Board of Health the necessity of passing an ordinance, and seeing it enforced, for the destruction of the bed and bedding on which a person who has had the small-pox has been lying. The absolute importance of this measure is suggested to us by the relation of a fact, which occurred on Powell street, between Green and Union. Our informant is a trustworthy person, who lives in the neighborhood.

A man in the house referred to, had the small-pox; he was removed from it to the hospital. Another man slept afterwards in the same bed; he took the disease, and upon his removal or recovery, a child was placed there, who also took the small-pox. It is true the child might have taken the disease from being in the same house, but there seems a clear chain of evidence against the bed. It should, therefore, be the duty of an officer, deputed by the Board of Health, not only to destroy the bed and bedding, but also to see that the infected house is thoroughly disinfected. The loss of bed and bedding might in some cases be seriously felt, but where it is the cost would not be great, and restitution should be made from the City Treasury.

WHY DISCOURAGE VACCINATION?

We have noticed frequently, heretofore, the continued prevalence of the small-pox in this city. There have died in San Francisco since the advent of the disease in May or June last, probably not less than 500 persons; and the city is now actually losing from 16 to 20 of her population per week. The greater portion of the deaths which have taken place, have been caused by the most culpable carelessness on the part of the people. Individuals have neglected vaccination—hence they have taken the pestilence and died.

There was at the breaking out of the disease, a lack of preparation—a want of hospital accommodations—and perhaps suitable efforts were not made to reach the more ignorant portion of the community by vaccinating agents; but there is no longer any cause for complaint on these points. The only difficulty at present arises from the efforts of a few persons to spread the belief that it is dangerous to be vaccinated, when in truth there is no more risk from vaccination than there is from taking the prescription of a medical adviser. Not one person in a thousand, or perhaps ten thousand, is injured by being vaccinated, even by a charlatan or careless doctor. Must the people be left to die at the rate of 16 or 20 from week to week, from the effects of the foulest of all diseases, because such a thing as carelessness has been known on the part of a vaccinating agent? Those individuals, whether through newspapers or by conversation, who discourage vaccination, are doing a serious wrong to the public.

We copy the above excellent remarks from the *Evening Bulletin*, on a subject we have brought before the profession for the past three months, and we embrace this opportunity to express our hope, that the public vaccinators will be very careful in their selection of vaccine lymph. We know, that a great deal of bad or spurious vaccination has heretofore been performed, especially from the scabs of adults, who have been revaccinated. This, we do not hesitate to say, is careless, if not criminal practice, and we think the Board of Health would have done well, if they had procured a sufficient supply of pure lymph for the service of the public vaccinators, and others who might have needed it.

It seems necessary again to reiterate the truth, which England, France, and Germany have proved, that revaccination will, in the words of Sir J. Simpson, "*stamp out small-pox.*"

CURRENT LITERATURE OF THE MONTH.

PRACTICE OF MEDICINE.

THE HYPODERMIC INJECTION OF REMEDIES.

By Dr. Anstie.

Ten years' experience of the subcutaneous administration of medicines has convinced me of the satisfactory working of the method, and of the greatly increased power in handling remedies which it gives us. I conclude, however, that it is still very much unappreciated; for I not unfrequently meet practitioners who will not admit that there *can* be any particular advantage in it which the old way of giving medicines does not offer, and who are, moreover, possessed with a great dread of the dangers which they think it must involve. It may, therefore, be useful to sum up my experience, since, on the one hand, subcutaneous injection is not an invention or hobby of my own, for which I might feel an undue bias; and, on the other hand, I have used it very extensively, and tested its value in almost every possible way.

And first, as to the question of *danger*, let me say positively, that there is *absolutely none* if the injector will remember two cautions:—first, that the physiological activity of nearly every substance which can be thus used is *three if not four times greater when it is given by the skin than when it is swallowed;* and secondly, that the liquid injected must not be either markedly acid, or markedly alkaline, nor in any way obviously *irritant to tissue.* The only case of serious inconvenience which has occurred among the hundreds of injections I have made was the formation of a small abscess in the cellular tissue of a gentleman in whom I injected *chloroform*, an agent entirely unfit to be used in this way, as I am now aware.

The advantages of the hypodermic over the gastric administration are these:—1. Economy of the drug. 2. Entire abolition of the depressing or irritant effects which are locally produced in the alimentary canal during the *digestion* of various remedies. 3. Far greater *permanence of effect*, in many cases, than can be produced by medicine swallowed. 4. Much greater rapidity of action—a quality which makes injected remedies of priceless value in certain emergencies. One most important conclusion from these facts is this: *that anodynes and hypnotics ought never to be administered by the mouth in acute diseases attended with anorexia.* The practical importance of this principle is immense. Regular and systematic nutrition is the great necessity and the great difficulty in these diseases, and the avoidance of any treatment tending to interfere with digestion of simple food is a cardinal duty.

I shall first say a few words as to the operation of hypodermic injection, and then say a little about particular drugs.

The three kinds of syringe recommended by the Medico-Chirurgical Society's Committee (namely, Coxeter's, Whicker and Blaise's, and Weiss's) are each of them sufficient and good. The ideal syringe perhaps is a Coxeter, with the addition of a screw-joint by which the barrel can be removed and refilled without withdrawing the canula from the skin. Such an instrument is so cheap as well as handy, that the surgeon can afford to have two, in case of breakages: and breakage does not inflict very large expense. A country doctor should never start on his rounds without a syringe and a bottle of morphia solution, such as will be described presently. He should have one or two steel canulas, besides the gold ones ordinarily used; these are useful to penetrate tough skin, especially skin which has been frozen with ether spray, a necessary preliminary with some sensitive patients.

The best *mode* of making the injection is that described by Mr. Charles Hunter, to whom we owe so much of our knowledge of the subject, viz: to pick up a fold of loose skin and push the canula right through till its point works loosely in the subdermic cellular space; then inject slowly with two or three pauses of a second or two; wait one minute, and then withdraw the canula slowly, pressing firmly with the finger on the track and keeping it applied to the puncture for a minute or two. It is a mistake to apply plaster (except in the rare instances where a large quantity of fluid has to be injected), for it leaves an ugly mark on the skin for some days. However, it is not always possible to find a convenient loose fold of skin, and in this case another plan must be adopted. The skin must be strained to one side with the thumb, and the canula run in with a steady pressure; the disadvantage of this

procedure is that it is rather more painful, and that we are not sure of getting into the subcutaneous cellular tissue: failing this, it is rather more difficult to get the fluid in; the injection must be more slowly performed, and it may be necessary to apply plaster to prevent its escape. Otherwise, injection into the dermis favors instead of opposing the absorption of the fluid, as there are a much larger number of absorbent vessels in this situation. If the patient be very sensitive, it will be well to freeze the skin beforehand, with ether spray; a plan first suggested to me by Mr. Hart. It is convenient in that case to adopt a plan which Dr. Lawson devised,—namely, to perform the local etherization gently, thereby causing not a dead whiteness of the skin, with crystalization of the tissue, but merely depositing a thin layer of ice on the surface; this produces quite enough anæsthesia, and does not make the puncture so difficult as it is when the skin is frozen hard.

As to the *locality* to be selected for the injection, it is still impossible to lay down precise rules, but we know a good deal more than we did a few years ago. When the object is simply to procure sleep, to quiet general convulsion, or to inoculate the whole system with a constitutional remedy (*e.g.* quinine in ague), it is only necessary to find a spot where absorption is likely to be free; and we have thus a choice between many places. The skin near almost any large joint, when the joint is flexed, will generally offer a convenient loose fold; but, as already explained, loose skin is not necessary.

If the object, however, be to relieve *local* pain or spasm, it becomes a question whether, or in what cases, the injection must be applied to the painful part. On this subject the contradictory nature of the statements of different authors is remarkable. The first applications of the hypodermic method, by Dr. Alexander Wood, were local; but four years later (1859) Mr. Charles Hunter laid down the opposite principle of injection at an indifferent spot, maintaining that it made no difference in the rapidity and certainty of the effect, and that the painful locality was often inconvenient. But Professor Béhier, who is one of the best and most accurate of foreign observers, very shortly afterwards read (before the Academy of Medicine) the report of fifty-three cases of neuralgic and other pains, in all of which either cure or notable improvement had been effected by *local* injection of atropine, and at the same time stated that he had repeatedly endeavored to verify Mr. Hunter's statements, but had found injection at an indifferent spot altogether ineffective. Eulenburg, a writer of the highest merit, in a most learned and comprehensive treatise (Die hypodermatische Injection der Arzneimittel: Berlin, 1865), speaks strongly of the superiority of injection performed as near as possible to the painful point. He gives, in support of this opinion, a general reference to a large number of cases of his own, and makes particular mention of an instance of double *rheumatic* sciatica (I shall have something to say presently as to the exceptional position of such cases), in which local injection near a painful nerve produced a very much more decided and lasting relief of the pain on that side than on the other. Eulenburg relates some special experiments (made by him with æsthesiometer) in order to show that *tactile sensibility* is far more affected at the place of injection, in the case of hypodermic administration of narcotics, than at a corresponding point on the opposite side. He shows that injection of a narcotic at a point where a nerve trunk becomes superficial, will paralyse, more or less, tactile sensibility in all its branches below this point. And he quotes Rynd, Semeleder, and Von Graefe, who are distinctly in favor of the plan of injecting near to the painful spot. With such a conflict between high authorities it may be pardonable to form one's own opinion; and I must say that a large experience has led me to concur in Mr. Hunter's view of the matter, with certain modifications which do not affect his main principle. I believe that for the purpose of relieving local pain or cramp in a muscle, injection at any indifferent spot (which provides the requisites above mentioned) will do everything that is required, except in a limited number of cases. These exceptional instances are those in which the neuralgia is of old standing, and there has been a marked development of very painful points, with perhaps tissue changes as a secondary result. It especially includes also those cases in which neuralgia is a secondary result of rheumatic affections of the nerve sheath: the case of double sciatica above quoted from Eulenburg comes under this category.

As for the argument which has been urged for the use of local injection—that tactile sensibility is paralyzed in the skin near the point of injection—I must demur to its validity altogether. There is no need to produce any such anæsthesia of perceptive sensation, nor is it in itself desirable; on the contrary, it is a condition which very frequently, if not constantly, accompanies neuralgia itself, and is then apparently produced by the same causes which produce the active pain. I therefore consider that the observations of Eulenburg rather tend to refute than to support his views. And it is impossible to allow that in the case of neuralgia of an internal viscus, injection of morphia, &c., under the skin of the surface opposite the painful organ can be called a *local* injection. The two cases, therefore, of gastralgia which Eulenburg relates, in which injection of morphia in the epigastrium produced rapid relief of the pains, are all in favor of the efficacy of injection at an indifferent point. And certainly my own experience of the treatment of ovarian, cardiac, and gastric neuralgia speaks unequivocally to the effect that injection of anodynes beneath the skin of the front of the arm produces a relief of pain quite as rapid and complete as I have ever seen from the most carefully localized injections near to a painful superficial nerve. On the whole, the conclusion which I come to is this, that when the painful part is a convenient place for injection, it is as well to perform it locally; and that in rheumatic and other cases in which, from thickening of tissues round the nerve, the process of absorption is slow, it is desirable to do this even at considerable inconvenience, since the local effect is probably considerable; but that in the vast majority of cases it is absolutely indifferent, as regards the effect on the pain, where we inject, provided we select a favorable place for absorption, and that in these cases it will be desirable to vary the place of injection each time, in order to avoid local irritation and thickening.

And now with regard to the drugs that can be used. Those which I have myself employed are opium, morphia,* and codeia, atropine and its sulphate,* veratrine,* caffeine,* camphor,* Indian hemp,* strychnine,* aconitine, as hypnotics or anodynes; quinine* both as anodyne and antiperiodic; podophyllin as a purgative; prussic acid* as a calmative in vomiting; corrosive sublimate* in congenital syphilis; arsenic* and atropine* as anti-spasmodics. Besides this, woorara and nicotine have been successfully used by others for tetanus; conia for asthma and angina; digitalis for various febrile conditions; tartar emetic as an emetic, &c. Among those which are mentioned as having been employed by myself, all those marked with an asterisk have been found useful; the rest proved either inert or superfluous. As it would be quite impossible here to detail the results of all these experiments, I shall confine my remarks to two drugs which are comparatively well known, and two other drugs which are very little known, but will probably prove most important, as hypodermic midicines. The first two are morphia and atropine, the others strychnine and caffeine.

1. Morphia should be used in the form of acetate, dissolved with a minimum of acetic acid in hot distilled water, five grains to the drachm. As the salt varies in solubility, it will often happen that on cooling the solution will solidify: this is not of much consequence, as it can be heated in hot water at the moment of use. Ten grains to the drachm can easily be dissolved by the use of *glycerine:* but in the first place (according to my experience of the doses which are most useful) this is needlessly strong for any but quite exceptional cases; and secondly, an important question has suggested itself to Dr. Lawson, which I have not yet had time to settle decisively, whether the influence of glycerine does not diminish the physiological activity of morphia salts. I confess that I have grave suspicions on the matter; and meantime the five-grain preparation answers extremely well. One minim of this will represent one-twelfth of a grain, a very useful minimum dose in cases of slight neuralgic pain. Two minims (1-6 grain) is the best commencing dose for the relief of severe pain, and as a hypnotic in states of nervous irritability. Three minims (or ¼ grain) is an *unsafe dose to commence with:* dangerous and even fatal results have been known to follow its use. It should not be given till smaller doses have been tried. It can rarely be advisable to increase the dose above six minims (½ grain) except in the case of persons habituated to indulgence in opiates.

The advantages of the hypodermic injection of morphia over its administration by the mouth are immense. The salt, used in this manner, is at least three times as powerful, for every therapeutic purpose, as when swallowed; and, meantime, the majority of the unpleasant symptoms which opiates can produce are entirely absent. The fact seems to be, that in the gastric digestion of morphia much of the salt becomes decomposed, and its specific effect on the blood is lost; but during the digestive process it acts depressingly upon the gastric nerves, and *pro tanto* disorders the functions of the stomach. In acute diseases, and especially in delirium tremens, we ought never to give opiates by the mouth when subcutaneous injection of morphia is possible.

The advantages of morphia hypodermically administered over opiate medication by the stomach are such as would be *à priori* incredible, nor can they as yet be fully explained. In particular, it is impossible to account for the far greater *permanence* of its action in relieving nerve-pain, which is so marked as that its discovery has initiated quite a new era in the treatment of severe neuralgias. Affections of this kind, which under any of the older plans of treatment would at least have been very tedious, are sometimes cured after three or four injections of one-sixth of a grain each; and very many yield after a week or ten days of such injections, repeated twice daily. Even the inveterate and incurable "epileptiform" facial tic may be so benefited, that life, from being a horrible and intolerable burden, may become, not cheerful indeed, but comparatively peaceful and calm. Moreover, it is certainly the fact that there is far less tendency with hypodermic than with gastric medication to rapid and large increase of the dose, when morphia is used for a long time together. And the "antiphlogistic" virtues which have been ascribed to opium, would certainly, if ever, appear to be verified by the effect of hypodermic injections of morphia in threatening pericarditis, pleurisy, etc.

2. Atropine is an extremely valuable hypodermic agent for the relief of local pain and spasm. It should be employed in the form of solution of the sulphate: four minims containing one-sixtieth of a grain; two minims will be the proper commencing dose in adults, unless the pain to be relieved is very severe. It should be cautiously increased to one-sixtieth or one-fiftieth of a grain; more can seldom be needed, and very uncomfortable poisonous effects may easily be produced if it be pushed to higher doses. *Apropos* of dosage, it is a positive duty here to notice one of the most astounding blunders ever committed by an eminent teacher—a blunder by no less a man than M. Trousseau—which, if not corrected, might lead to most seriously mischievous, or even fatal practice. M. Trousseau makes the amazing statement that atropine is less active by the skin than by the stomach, and that as much as *one-tenth or even one-fifth of a grain may be used without causing inconvenience.* He even proceeds to say that the same rule applies in the case of morphia, which is similarly more active by the stomach than by the skin! This is Homer nodding with a vengeance; and one can only hope that scarcely any one has read that part of M. Trousseau's otherwise excellent paper. Otherwise the consequences might have been very grave, if we consider that one-fourth of a grain of morphia has once proved fatal, and many times dangerous, and that the most serious symptoms have been induced by one-sixtieth of a grain of atropine. Indeed, the slighter spmptoms of atropism, which fortunately are of no serious moment (dryness in the throat, vertigo, and diplopia), are occasionally produced by doses three or four times smaller than this. Their appearance is an indubitable sign that it would be unsafe to push the remedy in larger doses.

Atropine is not a direct hypnotic, though it often makes sleep possible by relieving severe pain. It holds to morphia a notable relation in the series of hypodermic remedies for pain.

It is somewhat less frequently tolerated (in doses which are sufficient to relieve pain) than morphia; but it is an interesting and very valuable fact, that persons who are quite unable to bear morphia will often bear atropine, and *vice versa;* and even in cases when both remedies are tolerated, we sometimes find morphia, and sometimes atropine (the latter most frequently), producing a *permanent* effect. This relation, which I have often noted, has been remarkably illustrated in two cases which have been under my care during the last few days: one was a case of severe neuralgia attending shingles, and the other a case of extreme neuralgic pain from long impacted calculus in the ureter. In both cases morphia failed, and in the latter it always caused most unpleasant toxic symptoms, while atropine produced the most beneficial results in doses of one-sixtieth and one-hundreth of a grain, respectively. I have also obtained excellent results with atropine in a case of spasmodic asthma, when opiates could not be tolerated in any shape; and, on the other hand, a case was lately under my care, of sciatica in a young lady, where morphia acted beautifully, though atropine could not be borne even in the dose of one-hundreth of a grain.

A special hypodermic application of atropine which appears to me to promise the most valuable results, is its use in painful iritis, and especially in threatening glaucoma. I firmly believe that in two cases I have succeeded in preventing the latter affection from developing itself; at least the most threatening symptoms were present, and rapidly subsided under the use of one-sixtieth of a grain injections of atropine.

Finally, I may remark of atropine that it is incomparably the best of all medicinal remedies for every kind of pain in the pelvic viscera. Nothing can approach it in this respect.

3. *Strychnia* has been used by me in quite a different class of cases to that for which only, so far as I know, it has been used by others. I have seen no valid reason for using it in *paralysis*, as many have done. But I have tried and proved it to be a most valuable remedy in certain varieties of neuralgic pain, viz: gastralgia, and neuralgia of the heart. The proper form

is a solution of sulphate of strychnia, two grains to the ounce of distilled water, and the proper commencing dose is two minims (one-hundred and twentieth of a grain). The doses recommended by Eulenburg for paralytic affections are much too large for anodyne purposes, and we risk unpleasant toxic effects if we carry the dose beyond one-sixtieth of a grain. My decided opinion is, at present, that there is no such remedy for gastralgia as strychnia, subcutaneously injected in doses of one-hundred and twentieth to one-sixtieth of a grain.

4. The last hypodermic agent I have to refer to is caffeine, which I have employed in two cases of neuralgia and one of insomnia from chronic alcoholism. The dose employed in each case was one grain. In one instance of severe neuralgia of the superficial branches of the circumflex in the shoulder, two successive injections of caffeine (over the biceps) appeared to cut short the malady altogether. In a case of dorso-intercostal neuralgia attending shingles, the patient was injected daily for five or six days, with the effect of notably mitigating the pain on each occasion. And in a woman who had drunk to great excess for years, without ever having distinct delirium tremens, but could not sleep at all, and was a prey to distressing visual hallucinations, a notable improvement was effected by caffeine. She was injected twice a week for three weeks, and on each occasion got great temporary relief, which various other remedies (quinine, ether, morphia) failed to produce. Unfortunately, she then ceased to attend. I cannot but entertain the hope that caffeine may prove a very valuable remedy, both in neuralgia and in alcoholic insomnia.

On a future occasion I may perhaps return to the subject of hypodermic injection, *apropos* of other remedies which I have employed by this method.—*The Practitioner*, July, 1868.

MIDWIFERY.

UTERINE INJECTIONS.

By Montrose A. Pallen. M.D., of St. Louis.

Of the various subjects connected with gynæcology, no one, perhaps, has given rise to more diversity of opinion than the propriety of injecting the cavity of the body of the womb.

Without advocating the extreme views of Avrard (de Rochelle) in France, who treats nearly all manner of uterine troubles by injections, I must enter my protest against the opposite extreme of never doing it except as a *dernier ressort.* The deductions drawn were in a measure suggested by the writings of Mélier, Vidal (de Cassis), Aran, Scanzoni, Courty, Hardy of Dublin, Routh, Savage, Greenhalgh, and Sims, and they have been confirmed by experience, that keystone in the arch of all therapeutics.

Fortunately, the lesions of the uterus and its appendages, which produce hemorrhages, throw off the blood through the uterine cavities, else many cases of menorrhagia and metrorrhagia would result in intra-pelvic hemorrhages, the blood escaping within the peritoneal cavity, or around it, as the case might be.

Numerous sources of hæmorrhage are found outside the cavity of the uterus, and may be traced to the tissue of the uterus, the Fallopian tubes, the ovaries, the bulb of the ovaries, the pampiniform plexus of veins, the bulb of the vagina, and even to the utero-ovarian artery; all of which so intimately inosculate, that pathological or exalted conditions of either may constitute a cause for a uterine sanguineous flow.

Hemorrhages from the uterus proper are produced by polypi, fibroid tumors, sub-involution, chronic inflammations (metritis and endo-metritis), granular erosions and fungous growths upon the mucous tissues (flexions and versions?), cancer and cancroids, and, in the United States, too frequently, by abortion.

Puerperal conditions are sufficiently common not to warrant special attention in this paper. To those lesions which properly are outside the obstetrical accidents, but which belong to the sphere of the gynæcologist, is the treatment by injection particularly referable.

The pathologico-anatomical conditions may be summed up in a few words: 1. *Alterations of function without morbid growth*, such as emotional disturbances, mental depression, pulmonary or cardiac affections, excessive venery, fever sequelæ, etc., and which may be, and most probably are, the reflex results of ovarian excitement producing an over-erection of the uterus, which exaltation gorges the uterine veins and arteries, or permits the flow through the Fallopian tubes directly from the ovaries, pampiniform plexus, the ovarian bulb, or even the utero-ovarian artery; 2. *Alterations of function with morbid growth*; and are above enumerated in speaking of the hemorrhages from the uterus proper (sub-involution excepted, which is arrest of retrograde metamorphosis).

All works on diseases of the female sexual organism are replete with the treatment of menorrhagia and metrorrhagia, yet we frequently fail to benefit in the least these conditions. For some years I have observed a number of cases, and although I have no notes of some of them, I have tabulated a few, treated principally by injections to overcome the alarming losses of blood, and sometimes, even, to get rid of the causes producing them. In many instance if we fail to immediately check the flow, our patients may be lost; or, when it is not required to at once save life, we should offer every chance commensurate with prudence, which will prevent a long and tedious recovery, retarded by the profuse losses of blood, or small drainings, as the case may be.

Uterine injections are not devoid of danger, yet with proper care and management, they are not to be regarded in the unfavorable light heretofore given them by the profession. It is true that the fluid thrown in may pass through the Fallopian tubes into the peritoneal cavity, and bring on fatal peritonitis, or produce ovaritis, or salpingitis, or metritis, or endometritis, or embolism, the result of pathological thrombosis, yet I believe the fluid ought never to pass into the peritoneal cavity, and that the other results are so seldom, that they should never be considered as objections. Why such deductions are drawn, I will endeavor to explain.

1. No injection should ever be thrown in, *unless the internal os and the canal of the cervix be well dilated*, sufficiently large to permit the introduction of the index finger, which allows of a free flow back of the fluid from the uterine cavity.

2. The cavity of the uterus should be *first educated* by dilatation by sponge tents, and the injection of tepid water. The water serves the double purpose of accustoming the cavity to the impulse of the stream, and it also washes out any coagula of blood or collections of mucus, shreds, etc. Now, with regard to the first proposition: The dilatation of the internal os and cervical canal always exists after the expulsion of the ovum in abortion, else the hemorrhage would cease, because proper uterine contractions always produce a closure of the vessels opening into the cavity by a species of thrombosis; if any coagula, membranes, etc., remain within the uterus, it cannot contract, hence the necessity of getting rid of them, and the least dangerous method of so doing is by washing out with water or some other bland fluid. If the substances cannot be washed out, whenever the flow of blood is threatening, we should endeavor to produce artificial thrombosis by closure of

the gaping mouths of the bleeding vessels by means of styptics or irritants.

Again, when the condition exists of alteration of function with morbid growth, we can dilate by means of sponge tents, should the cervical canal and internal os be contracted. This leads to a species of education of the uterus, which accustoms it to a foreign body, and dilates the sphincter-like (?) internal os, so that it cannot contract spasmodically and force the fluid into the peritoneal cavity, or bring on uterine colic, which is in all probability something more than mere spasm of the uterus. It is true, that sponge tents sometimes produce most deplorable results. I have known metro-peritonitis to supervene after their introduction, of which the patient came near dying; and Prof. T. Gaillard Thomas reports a case of death by tetanus, supervening upon the same cause. To be forewarned is to be forearmed. Whenever the introduction of a sponge tent is followed by much pain, I always give instructions to be summoned, and immediately remove it, and provide for an anticipated storm, by the administration of such remedies as any prudent physician would suggest, consisting of hot abdominal fomentations, opiates, etc. No sponge tent ought to be permitted to remain longer than six or eight hours when first introduced; if, at the end of that time, the patient shows no constitutional disturbance or depression, the second and third tents may be allowed to remain a longer period, even for twenty-four hours, but under no circumstances beyond this time, as they become very foul and may give rise to septic fever, etc.

In chronic hypertrophy of the uterus, sponge tents are also very useful in producing absorption by compression, acting from within outwards, just as a well-applied bandage promotes absorption of an hypertrophied limb acting from without inwards. Every one knows that absorption of neoplastic tissue, particularly if the neoplasm in the uterus be the cause of the symptom hemorrhage, promotes a return of healthy function; and in the uterus this is a most important consideration for rational therapeutics.

The method of injecting the uterus is of no small importance: sometimes, however, we must be guided by the urgency of the case, and the circumstances surrounding it. Thus, for instance, on being summoned to a patient (No. 3 of Table) flooding profusely after an abortion in the second month, where the cavity of the neck and the internal os were well dilated, I have not hesitated to pass (wanting a better one) the ordinary glass female syringe up into the very cavity of the uterus, and wash it out with cold water (iced), and then, to throw in a solution, composed of one or two parts of Squibb's persulphate of iron, to three or four of water; this, however, was an extreme case, yet the result was most satisfactory. Again, I once used the hand-ball atomiser, and sprayed the cavity (in a profuse hemorrhage in a fourth month's abortion) with ether, followed by a solution (neutral) of sesquichloride of iron and water, three parts of the latter to one of the former. But when we have time, we should protect the vagina and soft parts, and use such a tube as will render it almost physically impossible for any fluid to pass through the Fallopian tubes into the peritoneal cavity.

A syringe absolutely air tight is also pre-requisite, else we might force air into the uterus, etc., which in turn might provoke very serious consequences.

When we have time to arrange every thing necessary, particularly in cases of hemorrhage due to the presence of fibroid tumors, or to hypertrophy, or to sub-involution, the fact should be explained to the patient that she is about to undergo an operation more or less hazardous. This candid statement always exerts a beneficial effect by schooling her mind and will, which enables her to render all the necessary passive assistance to the surgeon in a strict obedience to his wishes. The bowels should be opened by a mild aperient, which serves to unload the hemorrhoidal veins. The sponge tents, as many as are requisite, are then applied until complete dilation of the cervical canal and internal os has been accomplished. After the removal of the tents, the patient is placed in the left lateral semi-prone position, the Sims' speculum used, and the neck of the uterus hooked up by a double spring-tenaculum, which is self-retaining and always gives us complete control of the organ. A large silver catheter (or gum-elastic one when the cavities are tortuous), such as are used in washing out the bladder after lithotomy, is gently inserted to the very fundus, and a pint or more of tepid water (about 98° Fahr.) is thrown in by means of the air tight syringe, which washes away all coagula or mucus. The catheter is then withdrawn and examined to see if its canal be perfectly free, when it is again inserted, and the vagina packed with cotton saturated with mucilage of starch. The starch serves to render the iodine innocuous, should that be used, and it serves equally well to protect the soft parts when any other irritant is applied. The labia and perineum are also coated with starch for the same purpose. The fluid then is slowly injected, and if the cavity of the uterus be very large as in the case of certain fibroids, it is, after a few seconds, again drawn into the syringe, and may be again injected and once more withdrawn. This pumping out serves a double purpose, by not leaving an excess of fluid within, and also prevents its dribbling afterwards into the vagina, which sometimes gives rise to disagreeable circumstances. The patient still keeping the lateral semi-prone position, the catheter is gently withdrawn, and this too sometimes requires a good deal of nicety, as the contraction taking place about the internal os grasps the instrument with considerable firmness. After the tube is out, the cotton is taken away from the vagina, the tenaculum removed, and the whole well sponged with tepid water, and a second wad of glycerined cotton introduced. This completes the operation, and the patient is gently lifted on her back or side. The catheter, however, should not be opened at its distal extremity, but should be perforated in three or four different places on the side near to it. This precaution is necessary to break the current of the flow, and thereby prevents the possibility of shock from its impetus against the uterus, and also serves as a guard against the forcing of the fluid into the Fallopian tubes.

As the fluid enters the cavity of the uterus, the patient usually experiences a burning contracting pain, rarely violent, which seldom lasts more than six or eight hours, and frequently not more than three or four. Should irritative fever supervene, there is some tenderness over the hypogastrium, which sometimes extends over the whole abdominal walls. Opiates, hot poultices over the abdomen, and vaginal injections of warm water constitute the treatment when such exists.

In hypertrophy, sub-involution, or where fibroids exist, Sims evidently is right in explaining the rationale of uterine injections when they act beneficially, by bringing about "an endo-metritis minus the suppurative stage."

The hemorrhage is checked by the immediate styptic or irritant effects of the fluids operating directly upon "the hyperæmic intumescence of the mucous membrane," which is evidently very much contracted, and produces a thrombosis of the blood vessels ramifying in or adjacent to it. When the "production of plastic or adhesive inflammation," which Sims speaks of, takes place, following these injections, this in all probability is the result of a new action which arouses a metro-lymphangitis or metro-phlebitis which does not progress

as far as the suppurative stage. Thrombi are evidently formed in the uterine vessels by what Klob calls "continuous apposition," and lead to a complete occlusion of many of them which heretofore were gorged with blood, and which are easily ruptured.

"After lymphatic thrombosis has existed for a certain time, a secondary derangement of nutrition, generally of an inflammatory character, is developed in the walls of the lymphatic vessels;" so says Klob, in speaking of puerperal pathological conditions. Evidently such may be aroused by local applications which produce mechanico-chemical physiological conditions. This possibly might explain the secondary soreness and tenderness complained of by patients who were suffering from lymphatic or phlebitic thrombosis, or both, co-added to metritis or endo-metritis, or both, minus the ichorous condition (blood infection) produced by the suppurative stage. In fact, according to Virchow, complete thrombosis of the lymphatics usually prevents the passage of altered fluids into the blood, and becomes a barrier to infection, provided the thrombi do not soften.

Hemorrhages, most alarming in character, frequently follow abortions in the fifth month, or even somewhat earlier, even after the uterus is well contracted and all coagula or membrane-detritus expelled. This is explained by Virchow, confirmed by Klob, that uterine contractions are "not sufficient to arrest the hemorrhage from the placental veins, and that closure of the compressed venous extremities is finally accomplished by a physiological thrombosis. The size of these thrombi must be in proportion to the contraction of the uterus, and consequently according to the intensity of the endo-metritis, we find at the seat of the placenta, small or large thrombi, which give the characteristic uneven and nodulated appearance to this part." Certainly where uterine contractions exist, and firm ones at that, produced by the administration of ergot, and nature fails to set up this "physiological thrombosis," it seems rational to account for the cessation of hemorrhage by the injection of cold or irritant or styptic fluids, by the production of a species of mechanico-chemical thombrosis. As far as my experience goes, such has never yet run on to blood infection, or has been followed by embolism, the result of softened thrombi being carried off by the circulation and arrested in either the pulmonary or any other of the great blood vessels.—*St. Louis Med. & Surg. Journal, July*, 1868.

SECONDARY HEMORRHAGE, TETANUS, ETC., AFTER INCISIONS OF CERVIX UTERI.

By J. C. Nott, M.D., New York.

In the present fragment I propose simply to call the attention of the reader to a few detached facts which I deem of practical interest to those engaged in the special department of uterine surgery. And, first, a few words in relation to *secondary hemorrhage* following incisions of the cervix uteri, whether by the uterotome of Simpson, the knife of Sims, or scissors.

It is conceded on all hands that these hemorrhages are very perplexing when they *do* occur, and that without great caution in the manner of making the incisions, and in dressing them, troublesome hemorrhages *will* occur. The loss of blood may not only go to an alarming extent in women of robust constitution, but the consequences are much more to be dreaded in broken-down anæmic subjects who can illy spare an ounce of blood, a class of cases by no means rare.

Dr. Simms seems to regard those hemorrhages without dread, but directs, if bleeding follows immediately upon the operation, that the wound should be well plugged with a wad of cotton steeped in dilute persulphate of perchloride of iron, and then a firm tampon of cotton upon this. He does not fear secondary hemorrhage when such dressings are well applied.

Dr. Emmet is still more cautious; he treats every case operated just as if hemorrhage had already occurred; whether there is bleeding or not, he by means of alum-water and cotton tampons the wound and vagina thoroughly at once so as to guard against hemorrhage, which experience has taught him very often occurs not only hours but days afterwards.

Now I am free to confess that my experience is more limited than that of either of these distinguished gentlemen, and that they are more dexterous than I am in tamponing the vagina, and preventing subsequent hemorrhage; but still it is difficult for me to conceive that exceptional cases may not occur which will resist the styptic and tampon as applied above. Sometimes an artery (as I have seen) of considerable size, passes across the track of the cut, and there being no bone or resisting body behind, against which firm pressure can be made, it is easy to comprehend that a case may occur which will resist any pressure that is likely to be applied. Such examples have, unfortunately, occurred to me, and I will illustrate the point by the following case:

Mrs. H., the wife of a respectable clergyman, came to Baltimore, where I was then residing, in February last, to consult me. She was aged 33; was mother of four children, the youngest two and a half years old. She had excessive anteflexion of uterus, dysmenorrhœa from mechanical obstruction, hypertrophic engorgement of cervix, great derangement of nervous system, and shattered constitution.

Assisted by Dr. D. J. McKew, of Baltimore, I divided the cervix backwards, together with internal os, as directed by Dr. Sims, with a view of straightening the outlet, and the two subsequent menstrual periods have passed off without pain or trouble of any kind. The uterus being low in the pelvis, and the vagina capacious, the cervix was easily brought into full view, and all the steps of the operation executed and watched with great facility.

I waited some twenty or thirty minutes after the operation, and, seeing no appearance of undue bleeding, I proceeded to apply the dressings. A piece of patent lint soaked in glycerine was forced firmly into the divided os internum (which had been very superficially cut), the divided lip was plugged with a wad of cotton wet with liquor subsulph. ferri (one part to three of water), and a firm tampon of dry cotton was then placed over the whole. I waited a full hour to see that no bleeding followed, and, all seeming quite secure, took my leave to visit other patients. Hemorrhage came on a few minutes after I left, and it was more than two hours before I could be found and brought back to the case; in the meantime she had bled profusely, and I found her pulseless, blanched, and retching incessantly; they had been giving stimulants, but everything was immediately rejected. Her condition was truly perilous, and it probably would have cost her life had I been driven to the necessity of exhausting her remaining strength by removing the tampon and of applying new dressings. The blood was still welling up steadily from beneath the cotton.

I then resorted to the following expedient, which had served me a good turn in a similar case. I took one ounce of Squibb's liquor subsulph. ferri with three of water, and by inserting the nozzle of a syringe well down to the bottom of the vagina between its wall and the mass of cotton, injected the whole four ounces while pressure was made upon the vulva to prevent its escape. The pressure was kept up for about five

minutes to allow the blood to coagulate, after which not a drop of blood escaped.

The patient was much exhausted, and vomited everything immediately. I gave hypodermically one-third of a grain of sulph. morphia, which acted like magic; in ten minutes reaction took place; she slept for two hours, and woke up comfortable; stomach quiet, and able to take beef-tea, etc. The case afterwards did well.

Some of my readers will remember a typical case of dysmenorrhœa caused by obstruction from flexion, I published with diagrams in the July number for 1867 of this journal. Hemorrhage occurred in the same way in that case, and was relieved by precisely the same treatment.

These cases are always alarming, and so solid is the mass and firm the compression produced by the cotton and iron, that I do not believe any case can resist it. When we reflect that every crevice in the vagina and neck of uterus left by the cotton, is perfectly filled with blood, and that the iron when thrown in as directed forms with the blood and cotton a perfect mould as hard almost as cement, it is difficult to imagine how hemorrhage could continue; and I believe almost *any bleeding wound* could be advantageously treated in the same way when there is difficulty in litigating an artery. There is, however, an inconvenience from the use of iron and cotton in this way, to which it may be well to allude, viz: the difficulty in removing the mass when it becomes necessary to do so. The blood is very solidly coagulated, and with the cotton forms a black mass more like a cannon-ball than anything else, which requires to be gouged out piecemeal. It so completely impacts the vagina that the discharge of urine is prevented by the pressure on the neck of the bladder, and it becomes necessary the second day to remove the anterior portion of the mass so as to allow the introduction of a catheter. The day after the whole mass of blood and cotton may be removed, except the dressing in contact with the wound, which should be allowed to remain till loosened by suppuration. Great comfort, too, is afforded by syringing out the vagina freely twice a day with tepid water, to which is added a little carbolic acid or solution of chlorinated soda.

I will mention an additional point of interest in each of the above cases. In the first case, that of Mrs. H., symptoms of *tetanus* appeared on the thirteenth day after the operation, affecting the jaws and spine very decidedly, but the extremities little or none. The case was a mild one, but the symptoms did not disappear entirely under about four weeks. Morphia hypodermically soothed her and procured some five or six hours of good sleep out of the twenty-four, and was continued in half-grain doses not more than once or twice daily. This is the only case of tetanus connected with operations on the uterus that has fallen under my observation.

The other case to which I have alluded, I published as a typical one of dysmenorrhœa and sterility dependent on mechanical obstruction from flexion. In that case not only was the dysmenorrhœa relieved and general health restored, but a letter received from her husband two days ago, informs me that she is four months advanced in pregnancy. (See the number of this journal for July, 1867.)—*American Journal of Medical Science*, July.

Cannabis Indicæ in Senile Catarrh.—Dr. J. Curran Waring writes to us to say that he has found cannabis an invaluable remedy in catarrhus senilis. He administers it in ten-minim doses gradually increased, and suspended in mucilage. Its effects, he says, must be seen to be thoroughly realized. He believes that as an anodyne it is immensely superior to every other drug.—*The Practitioner*, July, 1868.

SURGERY.

DISEASES OF THE EAR.

Extracts from the Report of the cases of Disease of the Ear, treated by Dr. Joseph Gruber in the General Hospital, Vienna, for the year 1866.

For *Accumulation of Cerumen* in the external meatus, iodide of potassium was employed with glycerine to soften the mass, when too hard to get away by syringing alone; and for a considerable time after the wax was removed the same was applied by means of a brush to the walls in order to prevent its too free secretion.

Inflammation of the External Meatus was found generally to be caused by cold, and frequently it followed wrong treatment of toothache—*i.e.*, medicaments applied to the meatus itself. The treatment employed was early and free incisions through the soft parts down to the bone, after which warm water was syringed in to aid the bleeding. This procedure lessened the pain at once, and generally prevented suppuration.

Perforation of the membrana tympani often followed this affection, but the aperture always healed up. Several cases ended in opacity of the membrana tympani, with deafness resulting, and in such Dr. Gruber used resorbent ointment, as iodine, in the neighborhood of the ear, after the acute stage was passed. Concretions formed on the membrana tympani in two cases without interfering in any special manner with the hearing.

Chronic Inflammation of the External Ear, accompanied with granulations in the meatus, were treated by tents of laminaria, which dilated the meatus, and permitted of the local application of medicaments.

Acute Inflammation of the Membrana Tympani was always ascribed to cold. Feverish symptoms accompanied this affection. Perforation of the membrana tympani always followed, and once its complete destruction occurred. Local bloodletting was employed during the acute period; and for the otorrhœa which resulted zinc solution was dropped in. In two cases an irregular opacity of the membrana tympani was observed.

In Chronic Inflammation of the Membrana Tympani, it was, as a rule, very much thickened, and so covered with granulations that the malleus was hardly visible, hearing was impaired, singing present in the affected ear, and otorrhœa followed. In weakly patients, the disease had a tedious course, and generally developed itself out of previous painful inflammations of the ear, the peculiar nature of which was not well made out. Treatment was symptomatic; the granulations were occasionally touched with nitrate of silver; for profuse otorrhœa, astringents were dropped in; and for the thickening of the membrana tympani, resorbent ointments were employed.

In Thickening of the Membrana Tympani, painting over it with glycerine, iodide of potassium, and iodine was resorted to, and the hearing was often greatly improved. In cases of loss of substance of the membrana tympana, Gruber often obtains healing by making eight, ten, or twelve small incisions or nicks round the margin of the opening, the contraction of which in cicatrizing fills up the aperture.

Abnormal Adhesions of individual parts of the membrana tympani to the walls of the tympanic cavity were freed by the use of the air-douche applied through the Eustachian tube.

Acute Catarrh of the Middle Ear was observed in connection with long-standing catarrh of the nasal mucous membrane, hypertrophy of the tonsils following scarlet and typhus fevers, and occurring during the course of phthisis pulmonalis. The catarrh had occasionally caused perforation of the membrana tympani. In cases where nasal catarrh was combined with this affection of the ear, Gruber introduced astringents through

the nose by means of a glass syringe, and then caused the patient to expire forcibly with mouth and nose firmly closed, by which means a portion of the fluid found its way into the Eustachian tube. Astringents and other remedies were also applied directly to the tympanic cavity *via* the Eustachian tube.

Chronic Catarrh of the Middle Ear was found in connexion with hypertrophy of the tonsils, chronic nasal catarrh, syphilis, or consecutive, as in the case of the acute scarlet fever and typhus; and, lastly, in some patients where no special cause for disease of the ear could be discovered. Perforation of the membrana tympani frequently occurs, its seat being generally in the lower part of the membrane. In cases where the Eustachian tube was found to be narrowed, bougies of laminaria were employed to overcome the stricture. If the perforations already existing in the membrana tympani were not sufficient to allow of free exit for the discharge, he enlarged them by incision; and in all cases where two apertures were united by a "bridge" of membrane, the latter was divided to favour healing.

The singing in the ears which often accompanied this affection frequently continued, defying all treatment; while at other times it disappeared, as it seemed spontaneously.

Polypi was found to proceed in all cases from the mucous membrane of the tympanic cavity. In every case they were removed by means of Wild's snare. Their return was frequent, from the roots again growing, notwithstanding all endeavors to destroy the latter by means of caustics. The persevering injection of astringents was found to do good more frequently than the use of escharotics.

Stricture of the Eustachian Tube was, as a rule, found to remain behind after chronic catarrh. The membrana tympani in these cases was slightly opaque, and deeply drawn in against the inner wall of the tympanic cavity (cupped). Noises in the ears were present in many cases, but not at all prominent in others. Treatment consisted in the introduction of bougies of laminaria, with, at a later period, injection of solution of iodide of potassium, and, when considerable swelling of the mucous membrane was present, astringents.

In a case of *Caries of the Mastoid Process*, which occurred in a patient suffering from severe tubercular disease, of which he ultimately died, the facial nerve was found in the Fallopian canal, soaked in pus, and partially destroyed.

In another case there was exfoliation of a large piece of the mastoid process. The facial paralysis which occurred during the course of the disease, disappeared of itself, and the patient recovered.

Nervous pain in the ear has, only in a single case, been unaccompanied with carious teeth. It got better under the use of veratria ointment.—*Prag. Vierteljahrschrift.*

MISCELLANEOUS.

BLANCHING OF THE HAIR.

A paper read before the Royal Society, London, by Mr. Erastus Wilson, has thrown new light on the question as to what causes the sudden whitening of the hair, often produced by fright or profound grief. He cites a case in which the hair was colored white and brown alternately from end to end. The white segments were about one-half the length of the brown, and the two together measured about one-third of a line. Under the microscope the colors were reversed, and it was obvious that the opacity of the white portion was due to a vast accumulation of air globules packed closely together in the fibrous structure of the hair, as well as the medulla. There was no absence of pigment, but the accumulation of air-globules veiled and obscured the normal color and structure. Mr. Wilson suggested the possibility of the brown portion being the day growth, and the white portion the night growth. He also said, in reference to the sudden blanching of the whole hair, of which there were many cases on record, that during the prevalence of a violent nervous shock, the normal fluids of the hair might be drawn inward toward the body, in unison with the generally contracted and collapsed state of the surface, and that the vacuities left by this process of exhaustion might be suddenly filled with atmospheric air. An interesting discussion followed the reading of the paper. Dr. Sharkey alluded to a recent case of sudden blanching of the hair reported by Dr. Landois, of Griefswald, in *Virchow's Archiv*, which was ascertained to be the result of an accumulation of air globules in the fibrous substance of the hair.—*Phil. Med. and Surg. Rep.*, July 27th, 1867.

TOPICAL ANÆSTHESIA IN THE TREATMENT OF TRAUMATIC TETANUS.

J. G. Whitehill, M.D., reports having been called to a case of tetanus, in a boy of about sixteen years, who had trodden upon a rusty nail. The wound, although temporarily painful, healed over in a few days, and gave no further trouble. In about ten weeks he complained of slight stiffness of the muscles of the neck, and a difficulty in swallowing, which increased until well-marked symptoms of tetanus were recognized. The usual routine of treatment was tried without any apparent benefit. The inhalation of chloroform was thoroughly resorted to, and afforded relief *only* when total anæsthesia was produced.

The application of chloroform to the entire spinal column was then made by means of a cloth saturated with it, and evaporation prevented by covering the cloth with oiled silk. The application was made just at the approach of a paroxysm. As a result of the application, the paroxysm was averted, and in a very few minutes the patient fell into a calm and natural sleep, lasting several hours—the longest interval between the paroxysms he had yet enjoyed. On feeling a returning paroxysm, he asked for a re-application; and a second time the spasm was averted, and a comfortable sleep followed. For the next forty-eight hours occasional tetanic symptoms immediately yielded to the application of chloroform. The subsequent convalescence was rapid. Three cases reported by Dr. Hinkle gave a like favorable result from the same method of treatment.—*Humboldt Medical Archives.*

USE OF PAPER FOR SURGICAL DRESSINGS.

Dr. Addison Hewson (*Penn. Hosp. Reports*), struck with the fact that paper had been used in the place of lint as a surgical dressing in the recent campaigns of the Prussian army, tested its practicability at the Pennsylvania Hospital, and after numerous experiments, has settled on the common news-paper as the best substitute for lint, linen, rags or muslin.

The advantage of economy is no small consideration, as a yard of good patent lint costs thirty-three cents, while a sheet of paper, which equals that article in usefulness as a surgical dressing, costs only one cent. Dr. Hewson also uses Manila paper, coated with a thin layer of yellow wax, in place of oiled silk. In this way a saving of from four to six hundred per cent. is gained; besides affording the advantage of discarding everything appertaining to the dressings each day, by which one source, at least, of renewing contamination experienced in the employment of oiled silk is avoided.—*Medical Record.*

GLYCONINE.

For several years an emulsion of the yolk of egg and glycerine has been used in medicine and for various toilet purposes, to which the name of *glyconine* has been given, to recall its origin. The yolk of egg contains a considerable quantity of fatty oil (called *huile d'œuf*), now too rarely used medicinally. Glycerine does not dissolve fatty substances, but still, brought in contact with the yolk of egg, the two bodies seem to dissolve; a most intimate mixture is formed and remains transparent. M. Edm. Sichel, the originator of this preparation, attributes this transparency to the fact that the fat globules have about the same degree of refractive power as the glycerine in which they are suspended.

Glyconine has the consistence of honey, becomes cloudy on being agitated with water, and then changes into an opaque emulsion. It will keep almost indefinitely, which must be attributed to the eminently antiputrescent power of the glycerine. That which is ordinarily used is the product of an intimate mixture of four parts of yolk of egg with five parts of very pure glycerine. It is beginning to be used pretty extensively in the hospitals for dressing burns, erysipelas, fissured nipples, and various cutaneous affections.—*St. Louis Med. and Surg. Journal*, July, 1868.

SIR JAMES Y. SIMPSON ON MEDICAL PROGRESS.

At the close of the ceremony of "capping" the medical graduates of the University of Edinburgh, recently, Sir James Simpson delivered an address. In the course of his remarks, he said,—"A most extensive field for new investigations lies temptingly open for the young and ambitious physician in the almost innumerable series of new chymical compounds which modern organic chymistry has solved. Among this world of new compounds will probably be yet detected therapeutic agents more direct, more swift, and yet more sure in their action than any which our present pharmacopœias can boast of. It may be, also, that the day will yet come when our patients will be asked to breath or inspire most of their drugs instead of swallowing them; or at least when they will be changed into pleasant beverages instead of disgusting draughts and powders, boluses and pills. But that day of revolution will not probably be fully realized till those distant days when physicians—a century or two hence—shall be familiar with the chymistry of most diseases; when they shall know the exact organic poisons which produce them, with all their exact antidotes and eliminatories; when they shall look upon the cure of some maladies as simply a series of chymical problems and formulæ; when they shall melt down all calculi, necrosed bones, etc., chymically, and not remove them by surgical operations; when the bleeding in amputations and other wounds shall be stemmed, not by septic ligatures or stupid needles, but by the simple application of hæmostic gases or washes; when the few wounds then required in surgery shall all be swiftly and immediately healed by the first intention; when medical men shall be able to stay the ravages of tubercle, blot out fevers and inflammations, avert and melt down morbid growths, cure cancer, destroy all morbific organic germs and ferments, annul the deadly influences of malaria and contagions, and by those and various other means markedly lengthen out the average duration of human life; when our hygenic condition and laws shall have been changed by State legislation, so as to forbid all communicable diseases from being communicated, and remove all causes of sickness that are removable; when the rapidly increasing length of human life shall begin to fulfil that ancient prophecy, "the child shall die an hundred years old;"—when there shall have been achieved, too, advances in other walks of life far beyond our present state of progress; when houses shall be built and many other kinds of work performed by machinery, and not by human hands alone; when the crops in these islands shall be increased five or ten fold, and abundance of human food be provided for our increased population by our fields being irrigated by that waste organic refuse of our towns which we now recklessly run off into our rivers and seas; when man shall have invented means of calling down rain at will; when he shall have gained cheaper and better motive power than steam; when he shall travel from continent to continent by submarine railways, or by flying and ballooning through the air; and when—to venture on only one illustration more—tiresome graduation addresses shall no longer require to be written by old professors nor listened to by young physicians."

SULPHATE OF NICKEL IN NEURALGIA.

By J. Dabney Palmer, M. D., Monticello, Fla.

The interest of the following remarks does not lie in the employment of the sulphate of nickel in neuralgia, but in its therapeutic effects. We are told that it is a gentle tonic, acting like the preparations of iron and quinia. In this case, however, it seemed to exercise a sedative influence, more closely resembling that of the bromide of potassium.

Mrs. B. has suffered with neuralgia more than three years. During the last two months the paroxysms have been very violent and frequent—occurring every few minutes. She has taken iron, quinine, arsenic, strychnine, colchicum, aconite, morphine, chloroform, valerian, zinc, mercury, electricity, and many other remedial agents, with only temporary relief. As Prof. Simpson had used the sulphate of nickel successfully in a case of severe and obstinate periodic headache, I concluded to try it, and began February 19th by giving her half-grain doses three times a day. In less than a week the paroxysms were reduced to only one within twenty-four hours; this came on at noon. On last Sunday [March 1st] it did not commence until about 3 P. M. I was present and gave one grain of the sulphate, notwithstanding she had taken her regular doses that day. Its sedative action was speedily manifested in reducing the pulse and producing sleep. All symptoms of the paroxysm disappeared, and Mrs. B. states that they did not return until 7 o'clock. In this case the sulphate of nickel has given more permanent relief than any thing else; Mrs. B. tells me that it soothes her quicker than morphine, and is not followed by any unpleasant effects.—*Richmond Medical Journal*, April 18, 1868.

Nitrate of Silver in Cephalalgia.—M. Vignard reports some cases of this kind which are published in the *Journal de Médecine de l'Ouest*. In one case the patient had been suffering agonizing pains unrelieved by opiates. M. Vignard ordered the following:—Nitrate of silver, 10 centigrammes; bread, *quant. suff.* Six pills; one to be taken every hour. The result of this administration was complete relief. M. Vignard quotes Graves of Dublin, in support both of the practice and the theory involved in it.

Iodoform in Ulcerated Cancer of Uterus.—M. Voelker recommends the employment of an ointment containing about one part of iodoform to twenty of cacao butter, introduced into the uterus. When the inflammatory stage is passed, this, he alleges, will be found to give much relief.

TINCTURE OF PYRETHRUM ROSEUM, A SPECIFIC AGAINST NOXIOUS INSECTS.

A well known German traveler, F. Jager, in his *Sketches of Travels in Singapore, Malacca, Java* (Berlin, 1866), describes the powder of the Pyrethrum roseum as a specific against all noxious insects, including the troublesome mosquitos and those which attack collections. He says: "A tincture prepared by macerating one part of the Pyrethrum roseum in four parts of dilute alcohol, and, when diluted with ten times its bulk of water, applied to any part of the body, gives perfect security against all vermin. I often passed the night in my boat on the ill-reputed rivers of Siam without any other cover, even without the netting, and experienced not the slightest inconvenience. The 'buzzing,' at other times so great a disturber of sleep, becomes a harmless tune, and, in the feeling of security, a real cradle-song. In the chase, moistening the beard and hands protects the hunter against flies for at least twelve hours, even in spite of the largely increased transpiration due to the climate. Especially interesting is its action on that plague of all the tropical countries, the countless ants. Before the windows, and surrounding the whole house where I lived in Albay, on Luzon, was fastened a board six inches in width, on which long caravans of ants were constantly moving in all directions, making it appear an almost uniformly black mass. A track of the powder several inches in width, strewed across the board, or some tincture sprinkled over it, proved an insurmountable barrier to these processions. The first who halted before it were pushed on by the crowds behind them; but, immediately on passing over, showed symptoms of narcosis, and died in a minute or two; and within a short time the rest left the house altogether."—*Brit. Med. Journal*, May 30, 1868.

COMPARATIVE ACTION OF VARIOUS DISINFECTANTS IN THE PURIFICATION OF SHIPS' BILGES.

The *Medical Press and Circular* (June 10th, 1868) contains a translation of an interesting paper on this subject by Dr. Berenger-Feraud, published in the *Archives de Médecine Navale.*

The following are Dr. B.'s conclusions:

1. Wood charcoal is radically inefficient and inapplicable.
2. Chlorine and chloride of lime are hurtful as well as inefficient.
3. Carbolic acid is of no use, and has an insupportable odor.
4. Protosulphate of iron may for the present be preferred; it is sufficiently active to be of considerable use, and very low in price.
5. Permanganate of potash is infinitely superior to all the preceding substances, and is destined to put them all into the shade so soon as it can be sold at a figure permitting its use on a large scale. Even its present price is no bar to its employment, when it is necessary rapidly and completely to purify a ship's fetid bilges.

CARBOLIC ACID A CURE FOR TOOTHACHE.

A correspondent writes to the Lancet as follows: Among the many virtues of carbolic acid is that of giving relief from the pain of toothache. I have tried it in a great many cases, and with invariable success. To one drachm of collodium flexile (B.P. 1867) add two drachms of Calvert's carbolic acid, full strength. A gelatinous mass is precipitated. A small portion of this precipitate inserted into the cavity of an aching tooth gives immediate relief. It may be kept in the cavity by means of a bit of lint dipped in the collodium.—*Lancet, Feb.* 22, 1868, *p.* 275.

INFLUENCE OF WEATHER UPON SICKNESS.

Dr. Ballard's nine aphorisms on the influence of weather upon sickness, are thus given in his recent Report on the Health of Islington for 1867:—"1. That an increase of atmospheric temperature is normally associated with an increase of general sickness. 2. That a decrease of atmospheric temperature is normally associated with a diminution of general sickness. 3. That for the most part, the increase or decrease of sickness is proportional in amount to the extent to which the atmospheric temperature rises or falls. 4. That it is an error to suppose (as is popularly held) that sudden changes in temperature are, as a rule, damaging to public health. A sudden change from cold to hot weather is indeed very damaging; but a sudden change from hot to cold is one of the most favorable circumstances that can occur, when sickness is regarded broadly, as respects a large population. 5. That, remarkably enough, these influences are most marked in the directions I have mentioned, in the colder seasons of the year, and more certain in the winter than in the summer. 6. That rises and falls of temperature are more certain and effectual in their special operation upon public health, when at the same time the daily range of temperature is lessened, than they are when the daily range is at the same time increased; rises of temperature increasing sickness more certainly and markedly, and falls of temperature decreasing it more certainly and markedly. 7. That a fall of rain lessens sickness generally, sometimes immediately, sometimes after a short interval; and that, as a rule, the reduction of general sickness is greater when the fall of rain is heavy than when it is light. 8. That drought, on the other hand, tends to augment general sickness. 9. That wet weather in the summer season operates more certainly in improving public health than it does in the winter season.—*Med. Times and Gazette.*

AVERAGE DURATION OF LIFE IN ITALY.

The director of the Italian Life Assurance Society, M. W. Rey, has published some interesting statistics showing the average duration of life in Italy as compared with that in other countries, from which it appears that the mortality of Italians is exceptionally great. He shows that in Italy, 22½ per cent. of the infant population die yearly, and that, even in the healthiest districts, the average duration of life is 33.43 years old only, while in France it is 38.33, at Geneva, 42.02. and in England, 39.31. The number of births, too, is relatively much smaller in Italy than in England and France.—*Medical Record.*

THE PROPHYLAXIS OF BALDNESS.—Dr. A. F. A. King believes that baldness is more common in men than women, as it notoriously is, because of the tight pressure exerted by the hat-rim, which he believes exerts pressure upon the arteries of the scalp. He therefore recommends that great care should be taken in choosing a hat, to study the shape of the skull, and to take care that no considerable vessel is compressed. Hats might be made to order, with a semicircular concavity in the rim at the spot where the nutrient vessel of the part threatened with baldness passes. Of course, this theory and practice only apply to cases in which there is no other obvious morbid ause present.—*Amer. Jour. Med. Sciences.*

SCHÖNBEIN, the discoverer of ozone and gun-cotton, died recently at Baden-Baden. He was born at Würtemberg, in 1799.

ORIGINAL COMMUNICATIONS.

THE MIASMATIC DISEASES OF CALIFORNIA.

By J. CAMPBELL SHORB, M.D., San Francisco.

[Continued from page 78.]

The Eternal City, from the time her history emerges from the twilight of fable up to the reign of the first Tarquin, was the home of a fever, which through the greater portion of the year raged with deadly violence. Even in those far distant and misty days the source of this distemper was thoroughly understood, and the peculiarities of the paroxysm accurately described.

Stretching from the base of the Capitoline Hill to the Tiber lay a large and deep morass, and in many places in the valleys between the hills on which the city was originally built, were found swamps of greater or less extent, which, from their low position and proximity to the river, remained saturated with water in the dryest season, and where accumulated the large masses of water which were washed down from the sides of the several hills during the prevalence of rain storms. In these swamps, on which was poured the scorching heat of the fierce Italian sun, was generated that concentrated poison which gave rise to that terrible form of fever celebrated alike in classic verse and prose. Until the time of the advent of Tarquin, no wise or comprehensive system was adopted, having in view the expulsion of the fever by the draining of the swamps.

Convinced of the certain origin of this disease—urged by the hope of securing the lasting gratitude of his subjects and adding new strength to his dynasty, Tarquin built the Cloaca Maxima, which still remain enduring monuments of his skill and wisdom. The swamps of Rome were drained by these mighty sewers, built under the very streets of the city, through which a large barge could float with facility. While these lasted, the fever disappeared almost entirely from Rome, and, except in isolated instances, was seen no more until the invasion of the barbarians, when the Cloaca were broken down or choked up, and the waters, holding in solution large quantities of decomposed filth, reappeared in their original sites. The pestilence then returned, characterized by the same symptoms and attended with the same fatal consequences which had been met and checked by the consummate wisdom of Tarquin.

In many respects our city here is not unlike the city of Rome. We have the hills, the swamps, and the valleys, essentially the same, and we learn from those who have enjoyed opportunities for comparison, that the climate of San Francisco, through some portions of the year, especially in those still, clear, warm, sunny periods following on our first rains, closely resembles the climate of Rome and its immediate surroundings. And here, too, we have a fever which in its origin and nature is identical with the Roman Fever of present or remote times; a fever which we believe would equal, perhaps surpass it in violence and malignancy, but for the wind which blows in from the ocean, carrying with it saline matter in such a subtle state of subdivision—a species of dry solution, if we be allowed the expression—whose tendency is to carry away, dilute, or purify the poisonous exhalations which are generated in many portions of our city. The wind too, blowing from the Northern Ocean, from colder waters, keeps the temperature of our city, as a rule, below that standard at which rapid and extensive decomposition is possible, and the associate poisons are developed in less concentrated energies, and have a more circumscribed scope of influence.

We have now reached that portion of our treatise wherein will be considered that particular form of malarious disease which belongs especially to our city, and which comes under the daily observation of the majority of our practicing physicians. The importance of a thorough practical knowledge of this malady cannot be overrated. It is, *par excellence*, the disease of the town—the salient objective of three-fifths of all our intelligently directed prescriptions. We find it everywhere, on the summit of the highest hill, and in the valley—we meet it in the establishments of the rich, and the wretched squalid tenements of the poor, in the old and in the young—no age, sex, race or color is protected from its visitations—no season enjoys an immunity—no temperature, high or low, seems to exert any manifest controlling influence. Whether we regard the violence with which it occasionally presents itself, the range and severity of complications associated with it, and the occult way in which at times it gains mastery of the system, it is a morbid process of singular and absorbing interest—having the highest claims upon our consideration and attention. Success here as practitioners of medicine will be accurately measured by the manner in which we individually respond to the necessity of cultivating an intimate acquaintance with the symptoms and treatment of this omnipresent malady.

It may belong either to the remittent or intermittent variety, but, as far as our experience is concerned, the greater number of cases present it in the remittent character. It manifests itself in all grades of violence, from a simple febricula with slight constitutional disturbance scarcely necessitating professional interference, and runs up through a great variety of phases, terminating in a form of disease as deadly and rapidly destructive as any that can appeal for aid to medicine. No one may know from its initiative presentment what its future may be. We recollect a case which terminated fatally, in the beginning of 1867, which for three or four days showed no serious symptom. A sudden change took place, ominous symptoms supervened, and the little girl rapidly sank and died at the beginning of the sixth day. It is the part of wisdom, therefore, carefully to consider the means by which this disease may be aborted in its incipiency, and thus turned aside from the accomplishment of its destructive tendencies in the system.

We believe the means are within the acquisition of every intelligent physician. These are found scattered through the various authors, American and European, who have written on the subject of the nature and the treatment of paludal disease; they are also found in the accumulated observations of physicians, who, residing here for a number of years, have noticed the peculiarities as they presented themselves, of the various forms of miasmatic disease, and recorded in medical papers the outlines of the treatment which best fulfilled the several indications.

We have been in the habit of speaking of this morbid process as the "Town Fever." The term is not a scientific one, nor does it convey any clear idea in reference to the origin and nature of the malady; but it is convenient, and saves a deal of time,—obviating the necessity of elaborate explanation incurred by the physician on his declaration that the case then treated was one of miasmatic disease, or intermittent fever. It is a term, however, as suggestive as the Roman Fever, which has passed into medical literature, and been sanctioned by common usage for centuries.

We have spoken of the extensive range of this morbid process. While no locality seems entirely protected from its

visitation, there are certain sites where it is very prevalent; and here, too, the disease occurs in all its violence and malignancy. In these very sites, we may incidentally remark, other diseases, wherein there is no suspicion of miasmatic complication, such as the different typhoid processes, rubeola, scarlatina, diphtheria, the various inflammatory affections of the pulmonary apparatus, and the intestinal tract, and rheumatism, are more severe and intractable than found, all things equal, in other localities.

The whole southern sweep of our city—all the space, with the exception of Rincon Hill, bounded on the north by Market street, on the east by the waters of the Bay, and on the west by Ninth street—then that portion of the Mission enclosed by Valencia street, Eighteenth street, the Bay and Eleventh street—and finally that fraction of the city known as Hayes' Valley, are especially the localities in which the Town Fever is both prevalent and severe. There are other less circumscribed spaces in which it seems to have a permanent residence, but these are found irregularly scattered over the city, and it were waste of time to attempt to define them all. As a rule we may expect this form of fever in the vicinity of pools of standing water; or where buildings have been erected on sand covering the sites of old pools; wherever the land is made, or occupies such a low position wherein for an indefinite period the washings from the adjacent hills may remain until the sun's rays, the desiccating influence of the prevailing winds, the slight inclination of the soil, defective draining, or some equally slow and pernicious process, have removed them.

Every now and then in a perfectly healthy locality, where examination, no matter how carefully conducted, fails to reveal any general or palpable cause, there may occur one or two isolated cases of this fever. Its presence under such circumstances can generally be explained either by the fact that the seeds of the disease were received in some other locality, or some temporary defect in the sewer or drains attached to the house has caused the retention of filth or decomposed material, the exhalations of which have poisoned the atmosphere probably of sleeping apartments, and thus caused disease.

The rapidity with which disease follows an exposure to such morbific emanations is at times incredibly short; and the necessity of carefully and persistently watching the drainage of a house or neighborhood is of vital importance. A day's delay where a defect is noticed, may be fraught with mischievous and fatal consequences. This Town Fever will probably remain the most important feature of the morbid processes we shall be called upon to meet,—making undertakers rich and our cemeteries populous, until the authorities to whom the care of the public health is entrusted shall realize the obligations of their high office, and respond to the necessities of the times, carrying into execution some such wise suggestions as were splendidly outlined in the very excellent article of Dr. Stout, of our city, in the October number of the Gazette, on the subject of the sewerage of San Francisco. We firmly believe San Francisco possesses such physical advantages as would insure her being the healthiest city of the world, without an exception, if the little which nature has left undone be completed by ourselves; if the authorities, urged by us, would take hold of the town regardless of expense, as Tarquin of old did of Rome, and build cloaca such as would secure to us the results so perfectly accomplished by similar institutions built thousands of years ago, and which with all our progress we have never been able to equal, much less improve.

We hold it a doctrine, endorsed by common sense and every feeling of practical comprehensive philanthropy, that the public health is a question which should take precedence of all other considerations, having in view the material and lasting improvement of a city; and though none may be so bold as to join issue with us in this proposition, we contend that the teaching of experience here is clear and unmistakable, and that there is no question more shamefully neglected or criminally ignored. Before fabulous amounts of public money are expended in gardens, parks, and drives, which are after all more ornamental than useful, we ask that the problem, whose objective is the methods by which the public health is secured and maintained, should be first satisfactorily solved. A healthy, thriving population, from whose shoulders our exertions now will have lifted the heavy burden of taxation, presented in the shape of doctors' bills and medicines, funeral fees and cemetery expenses, will attend without doubt to the ornamentation of our city, for that alone will be left for them to accomplish; they will build for themselves and their children places of public resort and amusement, such as are found in the older cities of the world.

But this is a question with whose solution we of right have nothing to do—it belongs to the future, to which we leave it. We who live in and deal with the present, stand face to face with solemn responsibilities, which must be squarely met; while the public health remains jeopardized by the existence of such evils as are within the scope of our influence to remedy or remove, silence or carelessness on our part involves a recreancy to duty essentially criminal; we, who from our professional studies are the natural and qualified guides of public opinion in such matters, must never relax our exertions until, by forcible, comprehensive and authoritative appeals to the common sense of our people, collective health is secured and guaranteed by such public improvements as will stand the test of time and experience uninjured.

In all ages of the world, or at least beginning at that distant period in which history, sacred or profane, first takes cognizance of the rites of sepulture, we know that honors have been paid to the dead. Death hushes the tongue of slanderous calumniation; invective grows silent, and passion and prejudice perish with their object. Abuse of the dead has always been, and is now held in merited abhorrence, as an act at once irreverent and indecent; and the maxim "De mortuis nil nisi bonum," which has become so famous, was after all but the expression of a sentiment long before felt in secret by humanity, and which will last, loved and cherished, until the destiny of the planet shall have been thoroughly accomplished. Useful, instructive, and proper as are the memorial monuments of the dead, beautiful as is the desire of friendship or affection to make the enduring marble the eloquent expositor of the virtues of heroic men and noble women who have passed from our midst, it seems to us the city of the living has often been sacrificed for the city of the dead. The father of two children, one of whom has been lost by a neglect of the hygiene of his home and surroundings, if straitened in circumstances, should first attend to having a sewer built, a drain dug, and the general causes of disease removed, that the life of his surviving child might not be sacrificed, before he builds a monument over the remains of that child which is beyond the power of time or fortune to injure—exempt from all the accidents of mortality.

We therefore earnestly ask that the vast sums which are injudiciously but not improperly expended to beautify and adorn the city of the dead—even the money which is used to build fashionable temples of worship, or ornamental drives and parks,—we ask in a word that the wealth which is lavished for ornament, should be devoted to the better purpose of securing the public health. Eighteen years ago this city was an insignificant village; it is still in its infancy, having however the strength and energy of a giant. Twice has it risen from

the ashes of a general conflagration, and, taking inspiration from disaster, it is fast approaching a position which the wildest enthusiast never predicted for it.

The time has not yet arrived for us to dream of making parks. It is within the last ten years that old New York interested itself in this direction. Our plain and manifest duty is first to have a healthy city, by leaving nothing undone to remedy the errors inseparably connected with such rapid growth and expansion as have been witnessed here. We do not ask for cloaca of such massiveness and size as Tarquin built for Rome, but we do ask for the adoption of such public measures as will relieve our city from the poisonous exhalations which defective sewerage allows to be generated and carried by the winds to every portion of the town. Then, and not till then, may our thoughts be directed to the embellishment of our city.

PATHOLOGY AND TREATMENT OF UTERINE DISPLACEMENTS.

By JOHN SCOTT, M.D., F.R.C.S.I., F.E.S.L., etc.

Surgeon to the California State Woman's Hospital.

CONTINUED FROM PAGE 80.

[By some misfortune the printer made use of the *unrevised* proof in printing my previous article, which in many places is nonsense, for instance: "spoon" for "spine," "undivided" for "individual," "effected" for "affected," etc.]

Retroversion and retroflexion of the uterus are generally spoken of as implying the same affection, the latter being considered as but an exaggerated condition of the former. It is, however, worthy of note that retroversion, pure and simple, is seldom met with, except under certain conditions, and when recognized, it becomes a matter of supreme importance to make an accurate diagnosis as to the existence or otherwise of complications, the presence of which would materially influence our prognosis and treatment. In the gravid uterus retroversion may occur so long as it continues a pelvic organ, *i.e.*, up to the end of the third month; and when it does occur, it is likely to take place suddenly and be attended with symptoms of the gravest import. In the unimpregnated uterus an extra-mural fibroid, an ovarian tumor, or an intraperitoneal pelvic hematocele, (if situated anteriorly) may push the uterus bodily backward into the hollow of the sacrum, the real nature of the case being liable to be overlooked in a cursory examination.

Retroversion is also found in connection with prolapsus uteri, both in the married and the virgin, while in the *latter* retroflexion is seldom or ever met with—at least I have never seen a case. In such cases it will be often found that while the body of the uterus is found occupying the hollow of the sacrum, the fundus is bent forward, constituting retro-ante-version instead of simple retroversion. Having thus adverted to the distinctions between retroversion and retroflexion—and I think they will be found to have a practical importance—it is desirable to notice the relative frequency of these versions as compared with those of an opposite character. One of the latest and most esteemed of modern writers, Dr. West, is evidently of opinion that retroflexions are more numerous than anteflexions. He says, "the natural tendency of the enlarged womb is to fall with its fundus backward into the hollow of the sacrum;" and again, "enlargement of the womb, whether from the presence of fibrous tumors, or dependent on simple congestion and consequent hypertrophy of the organ, or resulting from its imperfect involution after delivery, *is always much more considerable in its posterior than its anterior wall,** and the womb in consequence naturally falls towards that side which is the heavier." Further research has effectually disproved such reasoning; for while it may be readily conceded that retroflexions occur more frequently in women who have borne children, the fact nevertheless remains, taking versions as a whole, anteflexions are so much more numerous than retroflexions that the proportion is nearly 3 to 1 in the cases which come before us. In 249 versions, given by Nonat, there were 168 of the former to 81 of the latter, and in 171 cases occurring in Dr. Marion Sims' practice, the proportion was 103 to 68. In my own practice during the last 18 months, I have notes of 74 cases, and the disproportion is still more striking, for of this number 55 were anteflexions and 19 retroflexions. The discrepancies which exist in estimating the numerical frequency of these affections is, I believe, owing to a want of accuracy in detecting them; for while backward displacements are recognizable by the most cursory examination, anteflexions often pass undetected where the abdomen is loaded with fat or rigidity of the recti muscles exist. In addition to this, many medical men hold that partial anteversion is the normal position of the unimpregnated uterus, and they frequently overlook what is an actual deviation and a pathological condition of the organ. The relative influence of these versions in the production of sterility also demands attention, and here again anteflexions are found much more operative than the opposite, for the 250 cases of versions given by Dr. M. Sims, occurred in women who had never borne children, and the proportions were, as we have seen, 103 anteversions to 68 retroversions. In my own cases, taken indiscriminately, and including both the sterile and those who had borne children, I find that in 52 cases of ante-flexions only 8 belonged to the latter, while in 17 cases of retroflexion so many as 9 had been mothers.

The symptoms which characterize backward versions of the uterus need not occupy our attention, for they are not pathonomoric of the affection, and are such as are found in connection with chronic inflammation of the organ and its consequences. Its pathology having been discussed in a previous paper, we have now to notice the treatment laid down by the various writers on the subject; and here we may safely premise, that when authors of established repute are found to entertain the most divergent opinions of the nature and importance of an affection so common, and attended with so much suffering, it is but too evident that its *pathology* is imperfectly understood, and, so long as this is the case, its *treatment* must be equally imperfect.

One class of writers, including the French school, believe with Drs. H. Bennet and Scanzoni, that flexions and displacements, originating, as they maintain, from congestion and inflammation of the womb, are of themselves of secondary importance and require no special treatment—that the indication is, to treat the original affection, leaving the misplacement to take care of itself, and believing that it will either disappear, or be productive at the most of but a trifling inconvenience, not at all incompatible with the enjoyment of health, and undeserving of further attention. That this is but a "part" of the truth, and not the "whole truth," is evident to all whose experience justifies them in giving a reliable opinion on the subject. In *recent* cases, and before the uterus has become fixed in its position, it is quite possible, by rest, local depletion, and saline aperients, with tonics, to effect a restoration of the uterus to its natural position; but when the affection has become chronic, and effusion of fibrin into the parenchymia of the organ has taken place, the mal-position

* The italics are ours.

remains and perpetuates itself till measures of a more radical and comprehensive nature are adopted for its removal.

If a uterine version is not a *dislocation* of the organ—whether produced gradually or suddenly—I know not what it is; and to leave it in a position, where, by its pressure on adjacent organs, it interferes with their proper functions, while its own circulation and nutrition are at the same time injuriously affected, is to sanction a practice which can scarcely be called either scientific or rational.

The "mechanical" school, on the other hand, conceives that in the displacement itself, the *fons et origo mali* of the patient's sufferings are to be found, and that its rectification by the aid of artificial contrivances is all that is required—at least they assert that in the existing state of our knowledge on the subject more cannot be accomplished. The multiplicity and the ingenuity of the contrivances for propping up the poor diseased organ to which these ideas have given rise, may be evidenced by a glance at the endless pessaries of every form, shape and consistence, which are daily brought to the notice of the profession; and while each inventor claims pre-eminence for his particular bantling, *all* seem to forget that they are dealing with a living organism which too commonly resents their unwarranted interference with its sensitive condition, and refuses to obey their blind behests. Woman may indeed well bewail her lot when she considers herself not only heir to the sorrows which maternity entails, but is obliged to carry about with her, *and in her*, foreign bodies which at most only *relieve*, but do not *cure* the affections to which her sex has made her liable; while they too constantly produce filthy discharges, and give rise to ulcerations or perforations, and produce pelvic inflammations which fix the uterus permanently in its false position, and render her condition infinitely worse than before. It is but too evident that those who advocate these filthy and mischievous contrivances have never considered the actual position of the healthy, unimpregnated uterus, in the abdomen, and how impossible it is for them to imitate nature by the most ingenious of their contrivances. I purposely exclude everything in the shape of "stem" pessaries, for the reasoning which attempts to reconcile the possibility of keeping a foreign body, with impunity, for any length of time in the cavity of the uterus, scarcely merits refutation, and the injury and fatality which have resulted from this "spiking" of the uterus has caused the abandonment of the practice; but I take the case of the pessaries in common use, such as the circular, the air pessaries, Hodge's, Zwanke's, Graily Hewitt's, and all the endless varieties of which they are susceptible. Putting aside altogether the diseased conditions of the uterus which gives rise to misplacement, do they so rectify the latter as to place the organ in its *natural* position and *maintain it there?* I say most unhesitatingly, *no.* Take a retroflexed uterus, and is it possible, with the best devised pessary ever constituted, to raise the fundus fairly *above the promontory of the sacrum* and *retain it there?* Is not the vagina universally relaxed in these cases, and can you rely on a distensible organ as it is for affording the resistance which is needed to enable the pessary to give the requisite support? and if, unable to rely on its support, you insert an instrument sufficiently large to elevate the weighty organ, pressure must be exercised on the rectum behind and the urethra in front, and with what sad results experience can abundantly testify.

I am free to admit, that with the aid of a pessary to elevate the fundus, conception *occasionally* takes place (how rarely this occurs, all know) and that the nutrition of the organ may be so altered during pregnancy as to remove the original affection; but how seldom does this take place! and how often it happens, that the parturition over, the flexion recurs and is as bad as before. The use of pessaries in anteflexion is to be equally deprecated, not only from their positive inefficiency in the rectification of the displacement, but from the fact that they generally exaggerate the affection to a marked degree; and any one who considers the actual position of the organ must perceive that the pressure exercised is applied, not to the overhanging fundus, but to the point of flexion itself. This much I can honestly declare, I have long since totally discarded the use of pessaries in the treatment of uterine disease, except in cases of *procidentia*, where actual support is needed, and I am certain I have had no reason to regret my practice.

In entering on the treatment of retroflexion, the first and most important point to determine—a point which I have not seen insisted on—is, the existence or non-existence of *adhesions;* for in one case, where the uterus is *free*, we can confidently hold out the hope of a perfect restoration of the organ to its normal position and integrity, as the result of the treatment; whereas, in the other, our prognosis must be guarded, and while we anticipate such a marked and permanent improvement in the general health, and such a relief from local suffering, that the patient will cease to suffer from the affection, yet we may entirely fail to rectify the malposition itself. Taking, therefore, a case of simple retroflexion, we shall find the uterus bent on itself, generally enlarged, more or less tender on pressure, capable of being lifted up into its natural position by the cautious use of the sound in its cavity, but gradually falling back into its position on its withdrawal. The cervical canal is in the form of a bent tube or syphon, and at the point of flexure behind, an inch and a half from the os, the induration previously noticed will be found.

The treatment must be both general and local. While the functions of all the abdominal viscera are seriously interfered with, the portal circulation is especially deranged, as evidenced by the frequent occurrence of rectal disease in the form of hemorrhoids, prolapsus ani, fissures and ulcerations, and, as a consequence, the secretions of the liver are not only seriously disordered, but that viscus is constantly the seat of a passive congestion, which exerts an important influence on the health and spirits of the patient. To remedy this state of things, mercurial alteratives, and aperients such as castor oil, or compound jalap powder, should be given at intervals during the first month; afterwards, small doses of bichloride of mercury with vegetable tonics, such as calumba or cascarilla with muriate of ammonia, will be found all that is needed till convalescence has advanced, when the preparations of iron and quinine will be found of the utmost value. To assist nature in restoring the uterus to its normal position the following operation is then performed, and the proper time for its execution is the first week after the cessation of the catamenia, the patient's bowels having been freely acted on the day before. The patient lying on the left side, with the knees drawn up and the left arm behind the back, Sims' speculum is introduced and firmly held by the nurse. The anterior lip of the os is then seized by Sims' tenaculum, and with the long elbow scissors described by Emmet it is divided to the extent of about half an inch. The ordinary uterine sound is then introduced, and the organ having been with its aid restored to its natural position, it is withdrawn and replaced by the small silver probe, which is handed to an assistant who is directed to retain it *in situ* with its concavity forward. And if the patient is directed to lie with the body inclined forward, the organ will readily gravitate in that direction. Sims' knife (as improved by Emmet), with the blade in a line with the shaft, is then introduced, with the edge backwards through the os and *above the flexure*, and this latter is divided by an incision which extends along the back

wall of the cervix clean out to the os externum. The knife is again passed in with the edge reversed, and another incision is made along the front wall, beginning opposite the commencement of the first incision and terminating in the division of the anterior lip made previously by the scissors. In the absence of wood cuts, too expensive for a young journal to furnish, I feel it difficult to convey a correct idea of the depth to which these incisions are carried, but I hope it will suffice to say, that they must be regulated by the amount of adventitious deposit and hypertrophy which exist, and which vary in almost every case. They must be sufficiently free to accomplish the object in view, while such a division of the uterine tissues as would interfere with the future integrity of the organ must be carefully avoided. But little bleeding need be expected—but what does occur should be encouraged to the extent of four to six ounces, as a salutary depletion from the engorged tissues. Future hemorrhage may however occur, and to provide against it, and *prevent the premature closure of the incision*, small pledgets of cotton dipped in a solution of perchloride of iron and glycerine, in the proportion of one of the former to two of the latter, should be introduced in succession within the cut surfaces till all bleeding has ceased. The cotton must first be wetted and squeezed out before dipping it in the solution, and while the os is held by the tenaculum they should be pushed up by means of the long small pointed uterine dressing forceps, and finally a large pledget dipped in the solution left in contact with the os, to which it will readily adhere. Further tamponing of the vagina is unnecessary, and only adds to the discomfort of the patient. The after treatment is most important. The patient should be put to bed for at least ten days, and the recumbent posture should be rigidly enjoined for the first six or eight weeks, to provide against the gravitation of the organ backward, which sitting up or walking about would naturally produce. On the third day after the operation, the external pledget may be withdrawn and the vagina washed out by a gentle stream of tepid water. The internal pledgets must be allowed to come out of themselves, as the result of suppuration, and this will be effected in about three days more. The probe must then be passed through the line of incision, to break up any granulation or attempt at adhesion, and this must be continued at first every day, and afterwards every second day till the occurrence of the next menstrual period. At each visit we should, after passing the sound through the incisions, elevate the uterus to its natural position, and having anteverted it as much as possible, the *posterior cul de sac* of the vagina should be tamponed with cotton soaked in glycerine as an admirable support to the weakened organ. The pledgets should have a string attached for their withdrawal before bedtime, for a longer continuance than from six to eight hours will generate heat and discomfort in the vagina, and tend to produce an irritation of the parts. This local tamponing must be continued daily till the uterus has returned to its right position and manifests the power to retain it, and I need scarcely add how important it is that during this time no local accumulations in the rectum should be allowed to impede its ascent.

Under this treatment it is most gratifying to notice the uterus ascending from day to day to its natural position, so that on examining our patient after the cessation of the next menstrual period, we may find the retroflexion gone, and the organ, in some cases, actually slightly anteverted; but in severe cases a degree of retroversion of the fundus will still exist, which will, however, disappear under the influence of the after treatment. The uterus is, however, still larger and heavier than natural, and consequently occupies a lower position in the pelvis than it should do, and our efforts must now be directed to the removal of that state of chronic disease of the lining membrane of the cavity with which it is invariably associated, while we at the same time stimulate the absorbents to remove redundant tissue.

The precise nature of this affection I will not further discuss, than by stating that I believe it consists in hypertrophy of the mucous membrane, with enlargement of its follicles, accompanied by a tenacious, ropy secretion, considered as characteristic of chronic endo-metritis, of a very intractable nature, and for the removal of which I entirely rely on the judicious use of sponge tents, followed by injections. I have for some time entirely discarded the use of solid caustics of any kind, in the interior of the uterus, as uncertain in their action, painful in their application, and unsatisfactory in their results; and I believe fluid medications will eventually take their place, if but properly used, and their *modus operandi* correctly understood.

A day or two after the cessation of the catamenia a sponge tent, *just large enough to enter the canal easily*, should be inserted, and after a lapse of 6 or 8 hours, replaced by a larger, which can be worn till the following day. The patient then lying in the semi-prone position, with the speculum introduced, the tent is gradually withdrawn by means of the sponge tent forceps; and the instant it is found emerging from the os a sponge probang is pushed up to the latter to prevent the sudden ingress of air into the cavity which would otherwise take place. The cavity is then washed out by tepid water gently injected several times; and all discharges having been removed by sponging, about a drachm of the compound tincture of iodine, or a combination of carbolic acid, glycerine, and tincture of iodine, or a solution of permanganate of potash, in the proportion of 30 or 40 grains to the ounce, is injected into the cavity of the uterus.

After a lengthened trial of various medicines, I find that the following combination is the most suitable, as being entirely free from risk, permanent in its results, and not productive of the pain which other injections are liable to produce. The solution consists of: Carbolic acid one part, glycerine three parts, tincture of iodine four parts; and its application to these cases is universal.

The instrument I use for injection consists of a hard rubber tube, bent like the uterine sound, and attached to a hypodermic syringe which holds one drachm, and having passed it well up to the fundus, I throw in the fluid, *guttatim*, to prevent any of it passing into the Fallopian tubes, though I consider such an occurrence as most improbable with the most ordinary care. No precautions are necessary for guarding the vagina beyond the passing a sponge probang close to the os, to absorb the fluid as the uterus presses it out, for it does not injure the vagina and causes no pain.

If the canal of the cervix has been thoroughly dilated up to the fundus, the patient suffers so little from the injection that she is scarcely aware of the proceeding; but should any local pain result, the application of a very hot flannel to the hypogastrium will speedily remove it. In the preparation of the sponge tents I add carbolic acid to the gum, in the proportion of three drops to the ounce, which has the effect of medicating them, and to a great extent prevents the fœtor which renders them so objectionable. The patient should remain in bed for some days after the injection, and eight days afterwards it may be repeated, or a flat curved probe covered with cotton and dipped in the solution may be passed into the cavity. But *no application* should be made within less than eight to ten days before the next menstrual period. The repetition of this application after the two or three following periods will usually complete the patient's recovery.

Injections into the uterus have been regarded as dangerous, and at best but *transitory* in their effects, and therefore inefficient in the treatment of uterine diseases. I am convinced that this opinion is most erroneous, and has arisen from the manner in which they have been used and an ignorance of their effects. *All* injections into the uterus, even of the mildest character, are not only excessively painful, but positively dangerous, if the canal of the cervix has not been previously *well dilated;* and if used without this precaution will readily produce metro-peritonitis or pelvic cellulitis, with perhaps abscess and infinite suffering. The canal of the cervix well dilated, injections of iodine, permanganate of potash, or the combination above alluded to, can be used without any risk, and with scarcely any pain, while their effects in modifying the whole vitality of the organ are superior to that of any substance in the solid form—safer and more reliable. The following cases—one of retroversion with prolapsus, and one of retroflexion, will sufficiently illustrate the practice already indicated.

Retroversio et prolapsus uteri.—Mrs. ——; seen 17th Sept., 1867; aged 30; married 12 years; one child; one miscarriage.

History.—In tolerable health up to the time of marriage, but suffered from dysmenorrhea; labor natural but slow, and recovery imperfect; miscarried subsequently, and has never been well since; for nine years has had constant backache, feeling of dragging and bearing down, painful and profuse menstruation, always lasting ten days; leucorrhea and general ill health; has had a great deal of treatment and has worn pessaries, but has never obtained any permanent relief, and does not believe in the possibility of a permanent cure.

Present State.—Complexion sallow and unhealthy looking; is thin and has little appetite; catamenia regular but painful and too copious, always lasting ten to twelve days; leucorrhea; constant back-ache; sense of weight and bearing down; general debility.

Examination.—Pelvis roomy; vagina lax; uterus very low down and retroverted; erosion round the edge of os, which is patulous, and on separating the lips the mucous lining of the canal is seen, denuded of epethelium, and from the os a ropy tenacious mucus exudes. The uterus is prolapsed and enlarged to more than twice its natural size, but the hypertrophy is principally confined to the back wall, which is tender on pressure.

Treatment.—Alteratives and aperients; small doses of hydrarg. bichloride, and when convalescence was established, preparations of iron and quinine. The uterus having been replaced by the sound, the posterior wall was incised to the depth of about three-eighths of an inch, and a corresponding but much slighter incision made along the front wall. The probe was passed frequently through the line of incision to prevent premature union, and the uterus having regained its normal position, sponge tents followed by injection, in the manner previously laid down, were used, and resulted in a perfect recovery. The patient was four months and a half under treatment, and was under observation subsequently till August last, when she left for the East in the most perfect health and strength.

Retroflexio uteri.—Mrs. ——; seen 4th December, 1867; married; aged 32; one child aged 14; several miscarriages; tall, thin and unhealthy looking; had been very stout and strong.

History.—Was quite well up to time of first miscarriage, eight years ago; then began to complain of pain in the loins; a sense of weight and bearing down; menorrhagia; profuse leucorrhæa; vesical tenesmus; indigestion and general ill-health.

Present state.—Very debilitated, and incapable of any exercise without being laid up; uterus very low down, with the fundus occupying the hollow of the sacrum, and the os almost between the labia; flexure of neck very acute, with intense induration posteriorly; perfect mobility of organ, but great pain on replacing it, and falling back at once to its original position; partial rectocele and cystocele; catamenia profuse and occurring every three weeks; bowels confined; tongue loaded, and no appetite.

Treatment consisted in the administration of alteratives and aperients. Small doses of hydrarg. bichlor. and afterwards quinine with strychnine, iron and cod liver oil, with close confinement to the couch for a period of two months.

The operation above indicated was performed with the most satisfactory result in diminishing the size of the uterus, removal of the induration, and ascent of the organ to its natural position. The existing endo-metritis was difficult to subdue, and repeated introductions of the sponge tent, followed by injections, were needed for its removal, but the patient ultimately regained health and strength, and is now able to undergo any amount of physical exertion without fatigue or injury. It was most noticeable that the protrusion of the vagina entirely disappeared with the steady ascent of the uterus to its proper place. The treatment altogether extended over a period of five months.

GUN-SHOT WOUND—BALL LODGED IN THE ASTRAGALUS.

By W. F. McNUTT, M.D., M.R.C.S.E., L.R.C.P.E., etc.,
Late U. S. N., Surgeon to S. F. Dispensary, etc.

Ezra B., executive officer United States Sloop Choctaw, aged twenty-six, constitution impaired from frequent attacks of remittent fever. Marth 5th, 1864.—"Admitted on sick list for vulnus sclopeticum; received while on board the United States Ship Ouachita, during an attack on Harrisonburg, La., on the 2d inst."

"Mr. B. was standing on deck, directing the fire of the guns, when he received a wound in the right foot, a little below the internal maleolus. The ball penetrated a heavy balmoral boot, and deeply into the astragalus. Dr. Francis, of the Ouachita, says that Mr. B. experienced no collapse, but was sick at the stomach a few hours after receiving the wound. Dr. Francis, finding that the ball could not be extracted without enlarging its track, applied water dressing, and ordered the patient to be kept quiet." To-day, March 2d, on returning to his ship, he has no fever, very little swelling of foot, and no pain. I find the ball deeply imbedded in the bone, and cannot be extracted without enlarging its track, and conclude to continue the water dressings for the following reasons, viz:

The track of the ball usually suppurates. The ball being lodged, does not increase or hasten the suppuration of its track, providing the ball be removed as soon as the suppuration of its track be sufficient to facilitate its removal. The presence of the ball may give no trouble.

7th.—Continues comfortable.

10th.—Still comfortable; no inflammation; continue cold water dressing.

13th.—Very restless night; tongue coated; some pain in foot; bowels costive. R.—Seidlitz powder.

14th.—Last night had excruciating pain in foot and leg, with high fever. Gave sulph. morph. gr. ss. every half hour

six times. The pain not much relieved; gave chloroform until he got ease; put fomentations to foot. Quite easy this morning; bowels open. R.—Quinia sulph. gr. x.

15th.—Easy; good night; tongue still coated; no appetite; continue fomentations of anthemis. R.—Q. S. gr. i.

16th.—Continues easy; asks for the heat to be kept to foot. To-day took some egg-nog; wound granulating on the surface. Quinia sulph. gr. i.

20th.—Easy, and continues to improve; still no suppuration in track of the ball.

24th.—Comfortable; wound healing fast.

April 3d.—Moving about on crutches; wound nearly healed; can bear considerable weight on foot without pain.

15th.—Uses a staff; walks with very little pain.

May 1st.—Returns to duty; no lameness; feels a little stiff from the adhesion of integuments about the wound.

I have heard from Mr. B. within a few months. He is now fuel agent for one of the Western roads, and has never had any pain or inconvenience from his foot. The ball was no doubt round, and fired from a smooth-bore rifle.

While balls often remain in soft tissues without giving inconvenience, it is seldom they lodge in a bone without causing fracture.

"Il est assez rare de voir les balles s' arreter dans la tete des os sans y determiner de felure ou sans les faire éclater. Le Musée du Val-de-Grâce possède un beau spécimen de ce genre de fracture. C 'est une balle logée dans la partie postérieure de la tete de l' humérus ou elle a déterminé consecutivement une cavité, au centre de laquelle elle est mobile comme un grelot, sans avoir laissé trace d' aucune autre lésion." (L. Legouest Traité Chirurgie d' Armée.)

OVARIOTOMY.

By DR. ATLEE, Philadelphia.

[The report of the following case of successful ovariotomy was sent by Dr. Atlee to Dr. James L. Ord, of Santa Barbara, and he, being personally interested in the case, has sent it to us for publication.]

May 1st, 1868, I went to the Clifford House, corner of Thirty-first and Broadway, New York City, and met Drs. Elliott and Van Buren, in consultation, in the case of Mrs. S. W. H. She is thirty-four years old, has had three children, has always been regular until recently, and now there is a tendency to hemorrhage. The disease has existed about three years, sometimes diminishing in size and again increasing. She is larger than a woman at full period, irregular in shape, with a sulcus running from the left hypochondrium towards the right iliac region, and this sulcus is resisting like a ridge, and causes the appearance of two cysts. In the lower part of the abdomen, on the right side, there are solid deposits, which reach the linea alba. Fluctuation is distinct everywhere, even across the supposed septum, so as to leave that part doubtful. The pelvis is not entirely free, and the uterus is congested and throwing off an unhealthy secretion. The sound enters one inch. Dr. Van Buren says her pulse has been as high as 140, and never under 100. It is quite compressible, but better now than heretofore. Tongue has been red and patchy, now better. The veins on the right side of the abdomen were engorged and large.

It was agreed first to tap the patient; both for the purpose of completing the diagnosis, and also to give her an opportunity to rally and gain strength. Accordingly I passed a large trocar into the left of the linea alba, and drew off twenty-eight pints of very dark colored fluid, somewhat opaque and adhesive to the feel, and which coagulated by heat. In the tub it looked almost black. Several large plugs of ropy tissue plugged up the canula towards the last, which had to be removed by means of the sound before we could empty the whole cyst. There was but one cyst, and after the abdomen was emptied a polycystic mass could be readily felt and grasped in the hand, in the lower right side of the abdomen. This was flat and as large as a saucer. She bore the tapping well. The fluid measured twenty-eight pints.

June 17th, 1868, Drs. George Maulsby, U. S. N., La Pierre House; J. L. Atlee, Lancaster; W. F. Atlee, Burpee, Keen, Mears, Cohen, Landis, of Philadelphia; and Thomas P. Christ, of Chester, Delaware county, Pennsylvania, and Mr. Wilson, student, being present, I placed the patient under the influence of chloroform, (by the hands of Dr. Christ), and selecting Drs. J. L. Atlee and Mears as my assistants, I made an incision in the linea alba, about two or three inches in length, until I arrived at the cyst, which I opened, and ran its contents through my silk tube into the tub under the table, to the amount of several gallons (three). Its color was a deep olive green, semi-translucent and thick, and towards the last loaded with heavy flakes of lymph.

Upon passing my finger over the surface of the tumor, I found it slightly adherent to the walls of the abdomen. Immediately upon making an opening into the peritoneal cavity, several hydatids protruded, and which I picked away. I now enlarged the incision upwards and downwards, altogether to the extent of five or six inches, and separated all the parietal adhesions of the tumor; but the omentum, thickened and highly vascular, with immense and engorged vessels, was spread over the surface of the sac like a fan, and attached to it by strong adhesions, which were separated and the detached portion placed in the hands of Dr. Mears, so as to control the hemorrhage. I now endeavored to drag out the sac, but found it still adhered to the sides of the abdomen and to the pelvis. Adhesions were finally overcome, and the whole mass turned out, and yet there was found to be a very extensive attachment to the whole front of the pelvis, extending clear round to the right acetabulum. The attachment in front seemed to be such a mass, that I suspected the bladder to be involved; and, to decide this, I introduced the catheter, and found that the bladder was involved in the left border of the pedicle.

I now separated the upper portion of the attachment of the bladder, from the pedicle, so as to enable me to place the clamp, and then crowding the large, thick, wide mass of attachment into as small a space as possible, and, throwing around it a ligature to compress it still more, I applied the clamp to this constricted portion of the pedicle and cut away the tumor. The large and engorged omentum was now unravelled and spread out upon a towel, to examine for vessels; but there was such a general oozing from the periphery that the different fasciculi were embraced in three ligatures and five or six inches of the extremities were cut away.

The pelvis and abdomen were now cleaned out; the three stumps of the omentum were secured in the upper part of the wound by two needles; five or six metallic sutures were placed below in the wound, and the clamp occupied the lower border.

A solution of persulphate of iron was applied to the pedicle and omentum, and the wound dressed as usual.

There was considerable vascularity noticed in the abdominal cavity, and some oozing from all points of adhesions, and some of the intestines had a congested appearance. The left ovary was healthy.

This tumor consisted of the right ovary. There was one

large cyst, and multilocular deposits in the right side of it, in the pelvic region, and in its posterior wall; weight, between thirty and forty pounds.

The chloroform acted well, producing no sickness, and the pulse was well maintained during the operation. Before the operation the pulse ranged from 120 to 130.

The operation, including dressing and chloroforming, lasted forty-five minutes.

CASE OF INCISED WOUND OF THE ABDOMEN, WITH TRANSVERSE DIVISION OF THE SMALL INTESTINE IN TWO PLACES, AND DIVISION OF THE MESENTERIC ARTERY.

By JAMES L. ORD, M. D., Santa Barbara.

October 7th, 1867.—Was called to see B. O., a native Californian, aged thirty, who had received an incised wound in the left iliac region, over the spinous process of ilium. Arrived about two hours after he was wounded. Found the small intestines protruding enough to fill a hat, and cut in two places transversely, and a large branch of the superior mesenteric artery divided and bleeding profusely. The bowels were red and much congested; some of the fœces had exuded from the intestines. Tied the artery with white silk, and sewed up the intestines with common *sewing cotton*, and a fine needle; gradually reduced the bowel.

In tying the artery and sewing the gut, left about four inches of the thread, intending to leave the ends out, but in reducing the bowel they went in together. The external wound was partially closed by two sutures, leaving the lower part open, so as to let out the blood, etc., that might have collected in the cavity of the abdomen. There was considerable time occupied in reducing the bowels; as the opening was small, a little of either end was reduced at a time. No chloroform was used.

Gave Dover's powder, gr. xx., there being considerable pain and tenderness of the abdomen.

Next day gave hydrarg. sub. mur., gr. xx; there still being much abdominal pain on breathing.

October 9th.—Saw the man to-day; doing well; pulse, 86; breathing, 36; not as much abdominal pain on breathing; gave hydrarg. and tart. antim. to check peritonitis, and act on the bowels; considerable sanious discharge from the wound; gave no food, except water and corn meal gruel on the second day.

October 11th.—Had an operation from his bowels yesterday; little or no abdominal inflammation; appetite improving; ordered his diet to be increased; discharge from the wound still great; yesterday gave sulph. magnes. zss., in divided doses.

October 15.—Doing well, asked to get up; external wound smaller; discharge not so great; little or no tenderness on pressure of the abdomen, and no pain in breathing; at night complains of some pain which disturbs his sleep; gave sulph. morph., gr. j., at night; requested the attendants to notice if any pieces of thread pass the bowels.

November 10th.—This man rode to town to-day on horseback, distance about five miles, to report himself perfectly recovered. His attendants did not see anything of the pieces of the threads that were used in sewing up the wounds, and so I think they must have been absorbed.

October, 1868.—This man has since died (September, 1868,) with pthisis; was not able to make a post mortem, being absent at the time of his death.

OPIUM IN WOUNDS OF THE ABDOMEN.

By CHARLES C. LEE, M.D., New York.

Messrs. Editors:—I am induced by the case so intelligently reported by Dr. McNutt, in your issue of September, to offer the following record as an additional testimony to the great value of opium in the treatment of penetrating wounds of the abdomen. The case occurred during my service as House Surgeon to the Pennsylvania Hospital in Philadelphia.

Case—Andrew S., a large muscular man, aged thirty-three, was admitted to the Hospital on the evening of October 22d. In a fight with another man he had received two stabs—one in the back, the other in the abdomen. The former was an incised wound below the left scapula, three inches in length, extending through the skin into the *latissimus dorsi*, and filled with clotted blood; this was at once turned out, and the wound closed by sutures and compresses. The other wound was more serious. It extended a distance of five inches along the epigastric and right hypochondriac regions, from an inch above the umbilicus to the edges of the false ribs. Through this opening protruded the *gastro-hepatic omentum*, a knuckle of the *duodenum, the entire gall bladder* and about *two inches of the right lobe of the liver.* Hemorrhage was profuse from the small cutaneous arteries, but none of the intestinal vessels were wounded. The viscera were carefully examined, and, as soon as it was ascertained that none of them were injured, they were replaced in the reverse order to that in which they protruded. The wound was cleansed, and brought together by the interrupted lead wire suture, over which were placed a pad of dry lint, compresses, and a firm circular bandage. There was little or no shock, and, although the amount of hemorrhage must have been large, the man's pulse was full and slow—beating only seventy to the minute. Three-quarters of a grain of sulphate of morphia were given, perfect rest on his back enjoined and in an hour the patient was sleeping.

October 23d.—As no bleeding occurred during the night, and the wound was easy, the bandage was not removed, nor was the back examined. The morphia was continued in one-half grain doses every four hours, and the patient was confined to the most rigid diet—barley water, rice water, and thin gruel.

October 24th.—Bandage and dressings removed; wound looks well, but at two points discharges a few drops of pus; considerable tympanites in right hypochondriac region above wound; the parts were gently bathed with tepid water and the same dressings reapplied; the wound in the back is partly healing by first intention; the morphia was continued in the same quantities, and no change made in the diet.

October 26th.—Patient still doing well; dressings not disturbed; the morphia was continued in the same doses every sixth hour, day and night; no change in diet; the man passes his water freely, but has no desire to evacuate his bowels.

November 2d.—General condition still excellent; as the wound has suppurated more freely, all the sutures but two were removed and replaced by adhesive strips, over which the wound was dressed with simple cerate and the bandage as before; wound in back almost well; no change made in the diet, which still consists of barley water twice a day, and oat meal gruel at dinner; recumbent position maintained, and the morphia continued in same amount.

November 5th.—Granulations are extending rapidly along the wound; same dressing reapplied; the wound in the back is well, having chiefly closed by first intention; the patient is urgent to have his bowels open, and, as it is now a fortnight

since the accident occurred, the morphia is stopped, and an opening enema given; this brought away a copious stool and greatly relieved him; recumbent position maintained, but diet changed to milk morning and evening, with chicken soup and bread at dinner.

November 10th.—Wound almost closed, and sufficiently firm to remove the adhesive strips; patient placed on common house diet.

November 12th.—Wound quite closed and union firm; patient allowed to rise and walk about, which causes no pain or weakness. Health good and strength returning.

November 19th.—Discharged from the Hospital cured, although still a little weak from rigid dieting and long confinement to bed.

No recent authority upon abdominal wounds has failed to emphasize the value of opium in their treatment, especially if the viscera be wounded; but, in the class which the foregoing case illustrates, sufficient stress has not, I think, been laid upon its use. It is to be observed that peritonitis supervening upon these injuries is generally of the most fatal character, the traumatic loss of blood having often been so great that heroic treatment cannot be employed. Nothing can be more important, therefore, than the adoption of such measures as may ward off this complication; and the observation of a large number of cases, of which that detailed is a type, convinces me that of these agents opium, pushed to the verge of narcotism, properly holds the first place.

New York, October, 1868.

FERRI SULPHAS—SOME OF ITS THERAPEUTIC USES.

By WM. GREETHAM HATCH, M. D., Red Bluff, Cal.

Poisoning by the *Rhus toxicodendron* (poison oak) is of common occurrence throughout this country, and frequently communicated to blackberry parties who are brought in contact with it. Impressed with the idea of the erysipelatous character of the disease, and knowing, from personal observation, the benefit resulting from the topical application of the salt in question in cases of the *cutaneous* variety of erysipelas—more especially as recommended by Velpeau—I determined to make use of this salt in the next case which should present itself. Not many hours had passed, when I was applied to by Captain B. N., on account of his little daughter, who was suffering from poisoning by the Rhus—the inflammation affecting the face, hands, and arms, and spreading. I prescribed the following: R. Ferri sulphatis, dr.j.; aquæ, oj.; M. fiat lotio; with this the parts were to be bathed several times during the day. Marked relief was experienced, to the burning of the skin, from the first application; and, before the close of the next day, the disease was entirely subdued.

This is one of many cases which might be cited. In cases which have been seen by others, as well as myself, struck by the frequent inefficacy of the means resorted to and commonly advised,—lotions of the acetate of lead, the subborate of soda, etc.,—and reflecting upon the character of the inflammation excited by the "Rhus," I was led to try the remedy I propose. The results have been stated.

Pruritus Scroti:—A case of this presenting itself, for the relief of which various means, external and internal, had been prescribed by a practitioner in the country, and continued for a considerable period without any resulting benefit, I ordered the solution of the sulphate of iron, (dr.j., aquæ oj.,) administering a saline cathartic, and prohibiting the use of salted provisions, with prompt and permanent relief.

California Medical Gazette.

SAN FRANCISCO, NOVEMBER, 1868.

☞ *All letters and communications to be addressed to the* "Editor California Medical Gazette," care of A. Roman & Co., San Francisco.

FACILE EST INVENTIS ADDERE.

We are not of those who believe that misfortunes and calamities, either public or private, are unmitigated evils. Our conviction is, that if we see them from the right point of view, they are, if not actual blessings, in disguise if you will, at least sources of much after good.

Our recent earthquake, disastrous as it was in loss of life and property, and mentally demoralizing as it has been, doubtless will result, hard as the lesson appears to be, in much public and permanent benefit, in turning aside and preventing a still greater calamity and a larger loss to the community. We now know that we live in a certain earthquake zone, and we have the conviction that shocks will again occur. The next oscillation may be a few inches less than the last; it may be a few inches more—a few seconds longer; and if so, and we have not profited by the forewarning we have had, down come a proportionate number of our shoddy built buildings—bricks made of crumbling earth, instead of clay, and mortar of three-fourths sand, instead of the inverse proportion of lime. If this past earthquake teaches us to build better and with fitter materials, the blessing will have no disguise, and the chances of further calamity will be removed in exact proportion to the lesson learned.

Besides this earthquake, we have had, and still have, a severe visitation of an epidemic of small-pox, which has claimed at the least two hundred victims. Any day we may have cholera, typhus and typhoid scourging us; or it may be diphtheria, or malignant scarlatina will mow down our children, and leave our hearths desolate. This small-pox may be a blessing, and spare us a more severe sacrifice, if we profit by the lesson that modern medical science is throwing open before us.

We do not imagine, that any one now denies that these diseases are of a most infectious nature—that something is communicated from the sick to the healthy; but when we ask what that something is, we are told it is a gas, a solid, a liquid, a germ either vegetable or animal, a poison, or a virus.

A host of medical philosophers, amongst whom we may mention, Farr, Pasteur, Pacini, Chaveau, Thompson, Hassal, Beale and Frankland, have almost mathematically proved that the phenomena of these diseases are similar, if not identical with those of fermentation.

Mr. Wm. Crookes, F. R. S., employed by the British

government to investigate the causes of the cattle plague, in his report to the Commissioners, has thrown much light on this subject. He says:

There are weighty reasons for deciding that the infecting matter is neither a gas nor even a volatile liquid. The almost infinite attenuation which a gas undergoes owing to its rapid diffusion into the atmosphere, would render its supposed noxious influence imperceptible a few yards from the focus of infection. Moreover, the infection is capable of being carried a considerable distance in clothing or running water, and in a variety of ways incompatible with the behavior of gases. For these reasons, and many others unnecessary to adduce here, it seems clear that the disease must be communicated by the agency of solid, non-volatile particles.

The specific disease-producing particles must, moreover, be organized, and possess vitality; they must partake of the nature of *virus* rather than of *poison.* No poison yet known to chemists can approach, even in a faint degree, the tremendous energy of the active agent of infectious diseases. A poison may be organic, but it is not organized. It may kill with far greater rapidity than the virus of infection, but, unlike this virus, it cannot multiply itself in the animal economy to such an extent as to endow within a few hours every portion of its juices with the power of producing similar results. A virus, on the contrary, renders the liquids of an infected animal as virulent as the original germ. Strychnine may be regarded as the type of a poison, and vaccine matter as the type of a virus.

Many considerations tend to show that the virus of cattle plague is a body similar to vaccine lymph, and consists of germinal matter, or living cells, possessing physiological individuality, which, if not exposed to extremes of heat, cold, or dryness, are capable of preserving their activity for a certain time outside the living organism, of adhering to material objects, and of being carried from one place to another by currents of air; each, when introduced into the blood, requires a certain time (known as the period of incubation) during which the septic germs develop and multiply, until they have so far poisoned the blood that the ordinary symptoms of disease become manifest.

The blood poisoning thus set up may legitimately be called "fermentation;" it is a decomposition caused by the act of nutrition of the living cell, whereby it reproduces in incalculable numbers the specific septic germs which have given it birth. These gradually infest the blood and other animal liquids, and as the disease progresses are discharged from the skin, throat, glands, &c.; the breath, perspiration, and excreta of the animals forming vehicles for the distribution of the virus. By "living" cells, is not meant living, in the sense in which an animal, or even a low form of infusoria, lives; but living as a seed, or as vaccine matter, even when dried, may be living, inasmuch as it still possesses reproductive vitality.

It is by no means certain that the multiplication of these individual cells is the immediate cause of the blood poisoning. The analogy of the action of virus on the blood, to that of yeast on sugar, renders it more probable that this is not the fact. In the case of the best-known ferment—yeast—its cells multiply by feeding upon the sugar in the liquid; alcohol and carbonic acid being their excretions. It is therefore probable that during the multiplication of the virus cells, they, in a similar manner, impoverish and weaken the blood, by feeding upon some element in it, whilst at the same time they excrete a poison to which the symptoms of the disease may be immediately due.

The foregoing view differs from the prevalent notion, that the virus of contagion consists of decomposing organic matter, declining from a complex towards a more simple chemical constitution, and during its degradation inducing decomposition in the neighboring particles of matter. This chemical theory at first sight appears very plausible; but it fails to satisfy one necessary condition of the present case. It is possible to imagine that the force set free in the declension of a complex chemical molecule to a more simple form will be sufficient to raise a neighbouring molecule to a structure almost as complicated as the original; but according to this view the ferment would be constantly diminishing, whereas in reality it constantly increases in bulk. The hypothesis is therefore insufficient to explain the prodigious procreative power of the original particle. This power belongs only to the nature of an organized germ, capable of producing multiples of itself by a process of nutrition and subdivision. Thus the line of demarcation betweon organic poison and organized virus appears to be very clearly defined.

Admitting, then, the truth of the theory that these infectious diseases are zymotic in their nature, and that each is capable of being transmitted by its own peculiar virus, the next question is, how is it communicated from one person to another; how long will it retain its vitality; and will it increase and multiply under favorable conditions outside the body? We will again quote Mr. Crookes:

It is proved that the *materies morbi* will adhere to clothing, and can be carried a considerable distance in it; that the breath, perspiration and evacuations of the diseased animal are loaded with virus-cells; and that the secretions from the mouth, nose, and eyes are in a similar condition. It follows, therefore, that the sheds, in which diseased animals have stood, become impregnated with the virus, ready to settle on the clothes of every one who enters; that ponds, streams, and even wells may become contaminated through foul soakage; that a road over which diseased cattle have been driven may be poisoned along its whole distance by the evacuations and other discharges from the animals; whilst their very breath, carried by the wind, may plant the seeds of infection in all the healthy farms by which the road passes.

There is no difficulty in admitting that the infection may travel for a certain limited distance through the air, and it is even likely that it may be carried longer distances by fogs or heavy vapors, or by the gases of putrid decomposition; but it appears in the highest degree improbable that the germs should be able to retain their vitality for any length of time in the atmosphere.

Sufficient data do not at present exist to decide whether the germs can propagate themselves apart from the animal. Viewing them as of the nature of a ferment, it is not impossible that they may live and multiply in other warm liquids besides the blood; but the most reasonable supposition seems to be, that the presence of decaying organic matter, or the gaseous emanations from putrefying dunghills, preserves, or may even revive the expiring vitality of germs brought by men, dogs, vermin, or perhaps the wind; whilst the same causes which foster the virus-cells,—dirt, overcrowding, constant re-breathing of their own and adjacent animals' breath, an insufficient supply of fresh air, the presence of ammonia and other gases of putrefaction, together with inappropriate food,—may establish a deteriorated state of body, which causes the animals to fall ready victims at the first approach of the plague.

Dr. Farr, in his report just published on the causa-

tion and diffusion of cholera, in supporting his views of zymosis, says:

Each organ of the body has its proper life; and that it consists of minute centres of action, which have been called cells, globules, organic units, germs, granules, and other names. The cells, like the supposed vesicles of the clouds, are now shown to be solids, and Beale proposes to call them "germinal matter," which is perhaps a description rather than a name. "Monad" would serve to designate these living particles, but as it, as well as the other names proposed, have been already appropriated, these units of force and life may be designated *biads*. Nearly alike under the microscope, *biads* differ infinitely in power and variety; for instance, the brain-cells of man in an early stage of development resemble the pus globules of ordinary inflammation. "Masses which could not be distinguished from one another (even by Dr. Beale), manifest the most remarkable differences in power." * * * "By chemical analysis every kind of germinal matter (*biad*) yields one substance resembling fibrin, another allied to albumen, fatty matter, salts, and water." Of these *biads* all bodies are built up.

It is only with particular kinds of these *biads*, then, that we have to do in *zymosis;* and to give definite form to the theory, while *vaccine* lymph may be briefly called *vaccinine*, the granules of Chaveau may be named *vaccinads;* while those of *varioline* (small-pox lymph) are named *variolads;* those of *syphiline*, *syphilads*, and those of *chlorine*, *chlorads*, the cholera-genic molecules of Pacini.

It is life in this low form, where it is developed in isolated particles at war with those which constitute men, that generate zymotic diseases. An epidemic is the war of a conquering host of innumerable particles of life. It is therefore subject to the laws of growth and decay, both in the individual man and in communities.

It does not require anything to be said to prove that these arguments applied to the cattle plague, bear with equal force on any human infectious disease.

And now comes the practical part of our paper. Can anything be done to arrest the progress of infectious disease? Recent researches prove that much can be done, by availing ourselves of the remarkable therapeutic action of carbolic acid. This agent was used with marked success in England, Belgium, and Holland, during the prevalence of the cholera and the cattle plague.

Carbolic acid exercises a most powerful destructive action upon microscopic and primitive organisms, and all low forms of life. It is volatile, and therefore destroys any germs or sporules it may meet with floating in the atmosphere. A very minute quantity of a weak solution, added to water containing infusoria and animalculæ, destroys them instantly; added to putrid blood, sour paste, decayed cheese with mites, the destruction of life and arrest of putrefaction is instantaneous. In fact, the antiseptic properties of the acid are so powerful that, according to Dr. Grace Calvert, 1-1000th, and even 1-5000th, will prevent the decomposition, fermentation or putrefaction for months of rine, blood, fœces, etc., etc.; and its vapor also is sufficient to preserve meat in confined spaces for weeks; and even a very little vapor of this substance will preserve meat for several days in an ordinary atmosphere, and prevent its being fly-blown. Lastly, 1-10,000th has been found sufficient to keep sewage sweet, for Dr. Letheby states that through the use of such a quantity of carbolic acid, in the sewers of London, during the existence of cholera last year, the sewers of that city were nearly deodorized.

Mr. Crookes proved by an interesting series of experiments that the gases exhaled from the lungs of diseased cattle contained the germs or sporules of the microscopic animals, discovered by Mr. Beale in the blood of such animals; for having drawn the air from a close infected shed, containing diseased animals, through glass tubes in which cotton wool had been placed, one part of the wool was exposed for half-an-hour to the vapor of carbolic acid; two healthy calves were selected, and an incision being made beneath the skin, these pieces of wool were respectively inserted in each. The animal inoculated with the infected wool, which had been exposed to the carbolic acid, remained perfectly well; but the other animal took the disease and died in a few days. He further states, "I have not yet met with a single instance in which the plague has spread on a farm where the acid has been freely used."

Professor Chandelon, of Liège, says, "that out of one hundred and thirty-five nurses, who were employed to attend upon cholera patients, only one nurse died—as the precaution was taken to wash the nurses and have their clothes sprinkled with carbolic acid."

Such, then, being the facts regarding the therapeutic and disinfectant power of this useful agent, what shall be said, if knowing it, we refuse in the face of the continued spread of the small-pox, to avail ourselves of its protective influence? We therefore call upon the Board of Health, and all physicians having cases of this disease under their care, to give this carbolic acid a full and free trial. Let the room in which the sick person is lying have an atmosphere of it; let a solution be sprinkled on the floor, and woolen rags, saturated with it, be hung about; let all the excreta, as soon as passed from the body, have some of the solution added to them; let the sewers and cesspools belonging to the premises be flooded with a weak solution, and let every piece of clothes and all bedding that has been in contact with the disease be washed in it; let the body of the sick person be bathed in a weak solution; let all attendants wash in it, and sprinkle their clothes with it, and let it be sprinkled about and outside the house.

If the foregoing facts are philosophical and true, and there seems no reason to doubt them, may we not, by adopting the means just suggested, and others that

will suggest themselves to the mind of every intelligent physician, not only immediately arrest the further increase of small-pox, but in the future limit to a single case any attack of cholera, diphtheria, typhus or typhoid fever.

NOTES OF THE MONTH.

SMALL-POX.

We regret to have to record the continued prevalence and increase of small-pox. No account of the number of cases that have occurred since its first outbreak in June, can be ascertained at the Health office, as all cases are not reported; but the deaths from this disease are as follows:

June	20
July	37
August	62
September	71
October	70
	260

Showing a steady onward mortality. On enquiring at the Health Office a few days since, we were informed that the reported new cases were increasing at the rate of ten per cent. daily; and this in spite of our having a Health Officer, and an Assistant Health Officer for the epidemic, and public vaccinators. Something surely must be wrong; proper preventive means must be neglected, or there must be gross inefficiency in some department, else this preventible epidemic would not march on with gathering mortality for the past five months. We feel we should be negligent of our duty as medical journalists, if we did not earnestly call upon the Board of Health to wake up from their supineness, and take the matter into their serious investigation.

We would suggest that they should see that the public vaccinators are doing *their* work efficiently. This is the second month of their appointment, and the whole city ought to have been vaccinated the first week. They should also insist upon new cases being taken to the Hospital, where it is practicable; or, if they are treated in their own houses, that the rooms in which they lie should be isolated as much as possible, and the whole house, and every one who approaches it, should be disinfected, in the way we have pointed out in our leader of this number. Not only this, and public safety demands it, they should insist in case of death, that all the bed and bedding on which the sick person has been lying should be immediately destroyed. We urged this in our last number, but seventy additional deaths have not spoken loud enough for any attention to be paid to it. It will not be sufficient to *order* it to be done, but the Assistant Health Officer and his employés should do it themselves.

Since writing our article on the disinfecting power of carbolic acid, we have received the October number of the London *Medical Gazette*, in which we find some interesting correspondence from India, on the protective influence of petroleum works in a highly malarious district in that country. The letters will be found in another part of this journal.

REVIEWS.

Vesico-Vaginal Fistula, from Parturition and other causes, with cases of Recto-Vaginal Fistula. By Thomas Addis Emmet, M.D., Surgeon-in-Chief of the New York State Woman's Hospital, etc., etc. New York, Wm. Wood & Co. San Francisco, A. Roman & Co.

Anything which proceeds from the pen of the distinguished Surgeon-in-Chief of the New York State Woman's Hospital is sure to merit the best consideration of the profession. We hail, therefore, with unfeigned pleasure, the appearance of the present work, as not only unique in the collection of a vast number of cases of one of the most distressing maladies to which woman is subject, but as demonstrating the triumphs of modern surgery in the repair of injuries till lately considered totally irremediable. We know of nothing in the records of plastic surgery which can at all compare with the results achieved by Dr. Emmet, for the cases cited by him were of such an exceptionally grave and complicated character, as evidenced by the great destruction of tissue involved, as to render surgical procedures apparently hopeless, except when aided by the untiring patience and skill which the operator has shown in dealing with them. Some things in the work are worthy of special note and the value of which will be thoroughly appreciated by those who are most conversant with the cases in question: 1st. The use of the scissors *versus* the knife, in all operations on the vagina. 2nd. The necessity of a preparatory treatment in cases where the existence of a mass of cicatricial tissue indisposes the parts to union, and which has so often defeated the best efforts of the surgeon. 3d. The operation for vesical calculus, by cutting through the "bas fond" of the bladder, and thereby obviating entirely the incontinence of urine so constantly the deplorable result of either dilatation or division of the urethra; and, 4th. The formation of an artificial urethra, accompanied by the power of perfect retention of urine! The writer has had the opportunity of demonstrating to some of his brethren the superiority of the scissors in the operation for vesico-vaginal fistula, and any one who has seen the ease with which the edges of the fistula can be revivified by the scissors, and the absence of that troublesome hemorrhage attendant on the use of the knife, will in future prefer the former to the latter. He has also had the good fortune to witness some of the operations in the New York Woman's Hospital, detailed in the book, and among others a case of artificial urethra, which greatly excited his admiration. We wish we could praise the illustrations. The wood cuts are wretched. We advise every surgeon to procure the work and study it attentively, for, as Dr. Emmet states, "the same fitting for a skillful operator elsewhere, will insure an equal success in at least half the cases which will come under observation."

Lectures on the Diagnosis and Treatment of Functional Nervous Affections. By C. E. Brown-Sequard, M.D., F.R.S., Fellow of the Royal College of Physicians of London, Member of the National Academy of Sciences, (U. S.,) etc. *Part I. Physiological Pathology and General Therapeutics of Functional Nervous Affections.* Philadelphia, J. B. Lippincott & Co. 1868. San Francisco, A. Roman & Co.

This pamphlet of 89 pages, (being the first of a series), contains four lectures on the causes, diagnosis, and treatment of functional nervous diseases, and is worthy of being read by every member of the medical profession. As the nervous element enters into and complicates more or less all diseases, the importance of the condensed vast experience of an accurate observer and good thinker, like Dr. Brown-Sequard, cannot be easily overrated. That portion of the lectures, (much the larger part) devoted to *treatment* is especially valuable to the practitioner, because it presents a *resumé* of the latest and most efficient remedies for the most troublesome affections he is called upon to treat. Some remarkably simple, novel, and at the same time very successful and scientific methods of relieving certain excited states of the nervous system are occasionally mentioned. The following quotations will exemplify this:

"The influence of an external irritation in producing a favorable change in the nervous centres is beautifully illustrated in cases of myelitis existing in a small zone, in the upper or middle part of the dorsal region, leaving below it all, or nearly all, the dorso-lumbar enlargement of the spinal cord in a very congested but probably otherwise healthy state. In seven well characterized cases of that kind that I have seen, (alone or with Professors Trousseau and Nélaton, and Drs. Charcot and Verneuil, of Paris, I. S. Ramskill and Hughlings Jackson, of London, and Dr. L. R. Stone. of Newton, Mass.,) there were, as usual in such cases, extremely violent and frequent reflex tetanic spasms in the lower limbs. In these seven patients, the spasms at once abated and quickly ceased when the big toe of either of the feet was seized and forcibly and suddenly drawn down, flexed as much as the ligaments of the joints would allow. I think the same means should be tried in tetanus, and particularly traumatic tetanus."

"In a case of coma with convulsions, due to a complete arrest of the urinary secretion after an attack of renal hœmaturia, in 1851, Dr. Tholozan and myself, after twenty-four hours of unsuccessful treatment, decided to apply heat on the skin of the loins and sides of the abdomen. A large silver spoon was dipped into boiling water, and was applied on eight or ten places. To our surprise and delight, we soon found the respiration improving; and, in less than a quarter of an hour, the convulsions ceased and the patient came to his senses, and passed a little water. The return of the urinary secretion had saved him. No doubt the irritation of the skin had acted by a reflex action on the secretory nerves of the kidneys, and produced the secretion of urine."

In the treatment of epilepsy the author thinks the most efficient remedy is a combination of the bromides of potassium and ammonium with the iodide of potassium. In chorea he prefers the preparations of arsenic or strychnine. Opium and sulphuric ether, (internally) in large doses, he deems very efficient in hysteria. We will conclude this notice by one other extract, from the chapter on the "Association of Remedies:"

"Our ignorance as regards the action of remedial substances, one upon the other, in presence of the tissues and fluids of the human organism, is too great for our trying blindly to employ large doses of powerful remedies simply on the ground of our knowledge of the action of these remedies when given alone, and still less on the ground of our knowledge of their chemical influences, one upon the other, before they enter the human organism. Experiments, therefore, on the therapeutic effects of two or more powerful remedies, employed together, should be made first with small doses, to be gradually increased if the effects show that this can be safely done."

The Science and Practice of Medicine. By William Aitkin, M.D., Edin., Professor of Pathology in the Army Medical School. Second American, from the fifth enlarged and carefully revised London Edition, adopting the new nomenclature of the Royal College of Physicians of London. With large additions by Meredith Clymer, M.D., Ex-Professor of the Institute and Practice of Medicine in the University of New York, etc., etc. In two volumes, with a map, lithographic plate, and numerous illustrations on wood. Philadelphia, Lindsay & Blakiston. San Francisco, A. Roman & Co., 1868.

We have received from the publishers the first volume of the above work. After all that has been said by the press in praise of its merits, and after the great favor with which it has in former editions been received by the profession, little remains to be said. This second American edition is from the London fifth. In bringing out each successive edition, the author has spared no labor in keeping it up with the advance of medical literature. It is *the* book for the young practitioner to have as his guide—being clear, philosophical, and practical—and certainly leading the van of all medical text books.

The American editor has done his part well, and made some important additions. The work is well printed on softly tinted paper, and is a credit even to the well-known house that issues it.

Diseases peculiar to Women. By Hugh L. Hodge, M.D., Emeritus Professor of Obstetrics and Diseases of Women and Children, University of Pennsylvania. Philadelphia, Henry C. Lee. San Francisco, A. Roman & Co.

In this the second edition of a work from the pen of so eminent a physician as Dr. Hodge undoubtedly is, we would naturally have expected to find an exhaustive treatise, or giving at least all the best means adopted at the present day for the relief and cure of uterine disease. In this we have been doomed to disappointment. We find but little new matter, if we except the chapter on uterine inflammation, which has been greatly enlarged; in fact, as the author says, "the chief object of the whole work is to exemplify the nature, consequences and treatment of nervous irritation as distinct from inflammation." That this has been thoroughly done we freely admit, yet while we have an eloquent exposition of the peculiar views of the author, we are by no means convinced of the correctness of his opinions; and the many brilliant operations for the radical cure of anteversion, retroversion, etc., are either wholly ignored or but cursorily alluded to. The work will, hovever, bear a careful perusal, and repay the reader for his labor.

Physician's Handbook. For 1869. By William Elmer, M. D., and Albert D. Elmer, M. D. New York, Townsend & Adams.

This handbook, or pocket book, has now become a medical necessity. Those who have heretofore used it, would find its loss a grievous calamity; and those who do not know its usefulness, will do well to purchase one for the ensuing year, of A. Roman & Co.

The Maternal Management of Infancy. For the use of Parents. By F. H. Getchell, M.D. Philadelphia, J. B. Lippincott & Co. San Francisco, A. Roman & Co., 1868.

This is a well-written, sensible little book—full of sound advice, and a counterblast to the many ignorant prejudices that

influence mothers in the rearing of young children. We assure physicians they will be doing good service by recommending this useful little work to every mother, who relies upon them for professional guidance.

Constipated Bowels: the various causes and different means of cure. By S. B. Birch, M.D. From the third London edition. Philadelphia, Lindsay & Blakiston. San Francisco, A. Roman & Co.

This is a most commendable little book, and we most heartily recommend it. It is full of thoughtful and suggestive ideas for the relief of the obstruction complained of, and points out the means to attain that end, rather by restoring impaired function than indiscriminate purging. Leading, not driving, seems to be the motto.

CURRENT LITERATURE OF THE MONTH.

THERAPEUTICS.

ON THE THERAPEUTIC USES OF BROMIDE OF POTASSIUM.

By J. Russell Reynolds, M. D., F. R. C. P.

The therapeutic effects of bromide of potassium are seen with the greatest amount of certainty and clearness when it is given to those who are suffering from paroxysmal diseases. The uses of this drug are, however, not limited to those affections, but may be observed in many others of which obvious spasm forms no part. It became a "fashionable" medicine a few years ago; and, like some of its predecessors in the circle of fashion, was soon over-rated, and misapplied; it failed to do in all cases what it had been said to do in some; occasionally it appeared to be mischievous, and often it seemed inert; and so, within the last few months, there have arisen those who entertain doubts as to its possessing real value in the treatment of disease. Being confident, however, that it is one of the most important medicines that we possess, it will be well to illustrate, at the outset of this paper—by a few cases, recorded as briefly as possible—the fact of its definite utility. Having done this, it will be sufficient to give only the general results of its employment in other classes of disease, where the action of the medicine may be defined with a somewhat inferior degree of precision.

It is purposed, therefore, first to speak of the use of the bromide in the treatment of the following groups of diseases:—1. Those marked by spasmodic contraction of the muscles. 2. Those characterized by disturbances of sensation. 3. Diseases displaying themselves in mental change; and 4. Affections of the vaso-motor system of nerves. A few remarks will then be offered on 5. The mode of action of the medicine; and 6. On bromism.

I. Of those diseases which are characterized by *spasmodic movements*, the action of bromide of potassium is most conspicuous in epilepsy; and of this fact, the following cases will afford sufficient illustration:—

Epilepsy.—A man, epileptic for eighteen years, his fits having commenced at puberty, and having recurred with great severity and at a high rate of frequency during the whole period, took bromide of potassium for the first time in January 1864; and from that date until this has never had a single seizure. The dose prescribed in this case was ten grains, to be taken three times daily; it was continued for nearly twelve months, and was then abandoned. There was no other medicine employed, nor was there any change made in the place or mode of living of the patient.

A lady, epileptic for eight years, the fits being of most distinctive character, and of frequent but irregular occurrence; and who during the intervals of attack, suffered much from "nervous feeling," great depression of spirits, incapacity for mental occupation, and constant "dread," commenced taking the bromide four years ago. Ten-grain doses were prescribed, and with the effect of prolonging the intervals between the attacks; but as the seizures returned, the quantity was increased, and again the fits for a time disappeared. They returned, however, for the third time, and the dose was augmented further. Similar events happened until the quantity of bromide administered was thirty-five grains, three times daily. This dose was commenced a year and a half ago, and since that period there has been no attack. The general health has been unimpaired, the nutrition of the body has been maintained, the menstrual functions have continued with perfect regularity, and almost the whole of the distressing feelings which formerly occupied the intervals of attack have disappeared.

A gentleman of middle age, overworked both mentally and physically, became epileptic four years ago. His attacks were of the severest kind, but during the intervals of their occurrence he presented no signs whatever of disease in any organ of the body. His attacks had been frequent and uncontrolled by "change of air," freedom from toil, dietic regulation, and medicine. He began to take the bromide, in ten-grain doses, two years and a half ago, and immediately the fits ceased, and they have not returned. Here there was no change in the mode of living, but the individual referred to continued to do the same kind and amount of work that he had done before. The medicine was gradually diminished at the end of twelve months, and was discontinued a year ago.

A young lady, epileptic from early childhood, and whose fits were of very frequent recurrence, it being rare for her to pass through twenty-four hours without a seizure, and who suffered on an average two fits a day, was first seen by myself several years ago, before the bromide of potassium had been employed in large doses. The drug was then given; but as it appeared to exert no influence upon the nature or number of the attacks, was discontinued, and other measures were employed without any beneficial effect. The intellectual faculties in this instance were most gravely injured. The patient could still read, but could not enter into anything even approximating sensible conversation. There was, however, no impairment of the "general health," and as, in spite of all treatment, the fits recurred with unaltered severity and frequency, all medicine was discontinued, and the patient was left to the care of her attendant nurse. She was lost sight of by me for nearly three years; but eight months ago I was again called to see her, as she had been rather more "restless" than usual in the intervals of her attacks, and it was hoped that something might perhaps be done to lessen the labors of her attendant. I then learned that the fits were as frequent as they had been in previous years, and that they had never shown any tendency to lessen or to change. The bromide of potassium was given in scruple doses, every six hours, and, from that day to this, there has not been one single fit. There has been no change, while taking these doses, in the uterine or general health; but there has been distinct although slight improvement in the mental powers.

A young man, epileptic for seven years since puberty, and having from five to seven attacks during the day, has taken the bromide of potassium for nearly four years, and with this result—that as the dose has been gradually increased the fits have diminished, and have now entirely subsided. Upon many occasions the attempts were made to lessen the dose; but within a few days of making such change in quantity, it was invariably observed that the fits recurred; and therefore,

as no ill effects were recognized from its administration, it has been, and still is, taken in large quantity.

A lady, subject to frequent attacks of *le petit mal*, and to occasional seizures of *le haut mal*, gradually lost both forms of paroxysm when the dose of bromide had reached thirty grains, three times daily. During fourteen months there was no attack of any kind, but at the end of that time, having diminished the dose of the medicine, the fits returned; they have, however, again ceased upon reverting to the larger quantity.

The facts that I have now briefly stated are sufficient to show that the influence of bromide of potassium upon epilepsy is not to be referred to the "chapter of accidents," but that it is an agent possessing a very distinct and beneficial effect upon one of the most distressing and obstinate of diseases. These cases are by no means rare or exceptional; they are, on the contrary, but a few specimens of what has been observed in very many others, and they are brought forward here in order to remove all doubt that might exist in the minds of some, who have not personally observed the action of the medicine in a large number of cases, as to its real efficiency. There is yet a further object in their citation, and it is this, to corroborate these general propositions—which it would be impossible to substantiate by details in this paper—viz., that in the vast majority of cases bromide of potassium is of signal service in the treatment of epilepsy; that it absolutely cures very many, and it rarely fails to diminish notably the number of attacks in those whom it does not cure. As with other modes of treatment, not only of this disease but of all others, it is most successful in recent cases; but, as I have shown by examples, it does not fail to be of service in those of long standing; and it most certainly is as useful in those cases where the fits are frequent and severe, as it is in others where they are of rare occurrence and of milder type. In some persons it fails to exert any beneficial influence; but these instances form an exceedingly small minority; and in the present state of uncertainty with regard to the exact pathology of the large group of diseases constituting what we term "epilepsy," such instances should not be allowed to detract from the reputation of so useful a medicine, but should only stimulate inquiry as to the nature of their departure from the more ordinary type of the disease.

The cases of epilepsy which have proved the most amenable to the action of bromide of potassium are those in which the attacks have been exclusively or prevailingly those of the severer type, *le haut mal;* in which the rate of recurrence has been rapid; and in which the fits have occurred mainly during the day; whereas, on the contrary, those that have resisted its action have been marked by a predominence of slight or abortive seizures, *le petit mal;* or have exhibited the severer attacks at rare intervals, or have suffered from them only during the night.

These statements, it must be remembered, are not absolute; they express only the general results of observation on many hundreds of cases; and particular exceptions occur to them in each direction.

Epileptiform Convulsions, occurring during the course of chronic or acute diseases of the brain, are often completely removed by bromide of potassium, the other symptoms of such diseases being in some cases relieved, in some removed, in others unaffected. Thus, a gentleman fifty-five years of age suffered an apoplectic seizure, was insensible for many days, hemiplegic on the right side, and frequently convulsed. Upon the return of consciousness the hemiplegia gradually diminished, but he remained aphasic, of enfeebled intellect, irritable temper, and a constant sufferer from pain in the head. Occasionally he improved slightly for two or three days, but was again thrown back by epileptiform convulsions. This state of things lasted for six months, during which time he was treated actively with many drugs and other appliances. Nothing, however, influenced the course of the disease until bromide of potassium was administered, when the fits ceased entirely, and have shown not the least threatening to return. Besides the effect mentioned in this instance, there was distinct relief to the headache, and some slight diminution of the irritability of temper. This case is but one of very many illustrating a similar action of the medicine.

Convulsions, not epileptiform in type, have sometimes been reduced by bromide of potassium, but, so far as my experience extends, only to such degree and with such irregularity as to make me doubt whether or no the relief was other than accidental. For example, a gentleman who after an injury to the back suffered several violent convulsions of epileptic character, became subsequently affected with persistent clonic spasms of the limbs. These spasms were sometimes so violent as to keep the patient in bed for many consecutive days, preventing him also from sleeping at night. Bromide of potassium appeared upon several occasions to diminish, and upon two or three to remove the spasms; but upon other occasions it failed entirely; and it happened to me more than once to witness the return of the spasmodic movements while the medicine was being continued, and that in large doses.

In very many instances of *general spasmodic jerkings*, occurring only at night, I have given bromide of potassium, but unfortunately without observing any distinct remedial effect. The cases to which reference is made are by no means rare; the patient exhibits no irregular or spasmodic movement in the daytime, and while awake, but the moment that sleep comes on there are violent spasms of the muscles of the back and limbs, which sometimes throw the body off the bed, but when not sufficient to do this are quite enough to cause alarm and prevent the return of sleep. In some such cases I have given the bromide to the extent of causing bromism, but without finding that it produced the smallest effect upon the symptoms, whereas in a few milder examples there was relief. A somewhat curious case may be mentioned here, for the double purpose of illustrating the above general statement, and of showing the great difference to be observed between the action of bromide of potassium and of iodide of potassium. A gentleman æt. thirty, had, five months after his marriage, suffered from the spasmodic movements above described; he then became epileptic, and continued so for three months. He was, when seen by me, intensely anæmic, but not weakened in limb, intellect, or appetite. He was prescribed iron, quinine, and cod-liver oil, and never had another epileptic seizure. His health appeared quite restored after the lapse of six months, with one exception, viz. the persistence of nocturnal jerkings. These were sometimes very severe, sometimes slight; but bromide of potassium exerted not the smallest influence upon them; and the same may be said of belladonna, stramonium, and opium. They were, however, reduced considerably by Indian hemp. Two years after the onset of symptoms this gentleman was exposed for a long time to cold and wet, his eyelids swelled very slightly, he suffered from severe headache, became again intensly anæmic, lost flesh, and was found to be passing urine so heavily loaded with albumen that it was rendered solid upon boiling. The nocturnal jerkings were worse than ever, and the general strength was greatly depressed. Treatment was adopted vigorously in this case, but without any effect upon the anæmia, the albuminuria, the headache, or the jerkings. After several weeks had passed in this condition, the patient directed my attention to a recent swelling on the front of his leg. I found

a node upon the tibia, a few scurfy, copper-colored spots upon the chest, and at once ordered iodide of potassium in large doses. The headache, albumen, jerkings, and node disappeared together, and within two months a healthy tint was observed on the face and lips. Two years have elapsed, and during that period his wife has become pregnant, he has been free from jerkings, has gained flesh, is now in good condition as to strength and color, and there is no trace of albumen in the urine. This case is only one among many which illustrate the difference in action between bromide and iodide of potassium; but one which it seems to me to be important to quote, inasmuch as I have often heard the two medicines spoken of as being closely analogous, if not almost identical in their mode of operation.

Hysteric Convulsion has been, in my experience, but very slightly influenced by the bromide; and the same may be said with regard to hysteric spasms. The nearer that a case of hysteria approximates one of epilepsy, both in its general features and in the characters of its attacks, so much the greater has been the utility of the drug. Those cases, on the other hand, in which there has been no distinct convulsion, but only an assemblage of so-called "hysterical symptoms," of which sundry spasmodic movements are among the most striking, have appeared to me to be often utterly unaffected by even very large doses of bromide of potassium.

Chorea.—In this disease there are two classes of motor disturbance which may be readily distinguished; the one is clonic spasm, more or less intense and persistent, which may be seen while the patient makes no attempt at voluntary movement; the other is a want of "co-ordination" of muscular action, seen only when such attempts are made. In all choreic cases both elements co-exist; but in some the first, and in others the second predominates. Where the principal failure has been the want of co-ordination, bromide of potassium has appeared to me to be absolutely inert; where, on the contrary, there has been much clonic spasm, and but trifling disturbance of co-ordination, it has sometimes seemed that the spasms have been affected beneficially by the drug.

Chorea, however, speaking generally, has in my experience been uninfluenced by this medicine. It is one of those diseases which, as a rule, yields so readily to simple hygienic treatment, that no safe conclusion as to the value of a drug can be obtained unless the patient be placed in circumstances which exclude that source of fallacy. Again and again I have taken choreic patients into hospital, for the express purpose of observing the effects of bromine; but have always carefully abstained from giving any medicine until the results of good nursing, good feeding, and the position in a large airy ward, could be distinctly recognized. It has invariably happened that all ordinary cases of chorea have begun to improve directly, and that they have recovered without any medicine; whereas in very severe cases, with or without complication, bromide of potassium has failed to exhibit the smallest remedial action.

In a marked case of congenital chorea, general in its distribution, and persistent for twenty-four years, the bromide was given in extremely large doses without producing any effects whatever except those of bromism. In another case of chorea, of three months' duration, the child being unable to sit up or speak, improvement commenced at once upon admission into hospital; but it proceeded tardily for a fortnight. At the end of that time bromide was given in full doses, but it appeared rather to retard than to expedite the process of recovery.

M. Gubler relates cases which appear to show that chorea could be much relieved, and even rapidly cured, by bromide, but my own experience is that stated above.

Local Clonic Spasms.—I have given bromide of potassium in many cases of "spasmodic wry-neck," of "writer's cramp," and of "histrionic spasm," without observing that in any instance it afforded relief. In some there was temporary and trifling abatement of the spasm, but in all these the symptoms returned to their original intensity, even while the drug was continued.

Persistent Tonic Spasm.—Bromide of potassium has, so far as I have seen, been utterly useless when administered in cases of this description.

Looking back then to the uses of this drug in the treatment of spasmodic affections, it would appear, 1. That its efficacy is most marked when the malady is "paroxysmal;" 2. That its value is high in proportion as the disease approximates the type of convulsion known as "epileptic;" and 3. That when spasmodic movements are "habitual," be they either tonic or clonic, local or general—its remedial influence is, at best, extremely doubtful.

II. Passing now to another group of diseases, those marked by occasional disturbances, there are facts enough to prove that bromide of potassium is of great utility.

Vertigo sometimes occurs paroxysmally without the co-existence of any obvious spasm—without any obscuration of consciousness, any failure of muscular power, or anything indicative of coarse organic lesion of the brain. In such cases, even after many months and even years of duration, I have known immediate and permanent relief from the use of bromide of potassium. Such cases are probably, though not obviously, related to attacks of "epilepsy," and they exhibit one feature of that disease in their amenability to the influence of this drug. It must, however, be remembered, that granting the epileptoid character of such affections, they are on that side of the malady which, as I have already stated, is the least influenced by the medicine we are considering.

Headache, of a paroxysmal character, and especially that which is accompanied by heat of head, and flushing of the face, is often relieved with much rapidity by the bromide.

Hyperæsthesia of the mucous membrane of the fauces, œsophagus, air-passages, and urethra, would appear to be reduced by large doses of the bromide of potassium; but for facts illustrating this mode of action the reader is referred to the papers of M. Voisin in the *Bulletin Gén. de Thérapeutique*, and of M. Gubler, in *L'Union Médicale*. My own experience of its utility does not lead me to confirm the statements that have been made upon these points.

III. In the treatment of certain diseases affecting the cerebral centres in such manner as to prevent sleep, bromide of potassium has proved of great utility. Here it is necessary to give the drug in such large doses as thirty or forty grains, at the ordinary bed-time, and to repeat it frequently in smaller doses, of ten or fifteen grains, during the day.

In *Acute Mania*, and especially when there is much heat of head and redness of conjunctivæ, I have repeatedly seen refreshing sleep follow the administration of one full dose. The patient may not have recovered from his mania when he awakes, but he is calmer, and less exhausted; and after a few days of the treatment above suggested, is sometimes well. In other cases, however, I have found no good result from the exhibition of this medicine. In the wakefulness of *Melancholia*, bromide of potassium has, often, in my experience, proved worse than useless. It has apparently aggravated the feeling of distress. Not so, however, in all cases; I have known it to be eagerly sought for by the patient's friends as the one thing that seemed to give relief.

It holds a similarly doubtful position in regard to *Hypochondriasis*, having utterly failed to afford any relief in some

cases, and having been highly prized by other patients. In both of these maladies it does but palliate symptoms. It must be remembered, however, that to relieve "symptoms" in the latter affection—hypochondriasis—is almost tantamount to cure.

Acute Alcoholism, with *insomnia*, is often beneficially treated by this medicine. It frequently induces sleep when opium has failed to do so; and there is no prejudicial effect produced by it upon the processes of secretion or excretion.

IV. There is yet another class of affections, to which I can make but a passing allusion here, viz., *disturbances of the vaso-motor system* in other parts of the body than the head; and over these bromide of potassium exercises a most valuable control. When such derangements take place within the skull, their symptoms are those already described as epilepsy, epileptoid seizures, vertigo, and the like. But throughout the body, changes, analogous to those in the cerebral circulation, may occur; and the symptoms by which they display themselves differ with the regions affected. Such symptoms are, for example, sudden numbness, coldness, deadness, or pricking sensations in one or more limbs; sudden, distressing, but indefinable feelings in the epigastrium, abdomen, or hypogastrium; or sensations akin to rigor, with much "anxiety," and palpitation or "fluttering" of the heart. In such cases it may be observed that the local circulation is interfered with; that, for example, the pulse in one arm becomes faltering, irregular in force and rythm, occasionally intermitting, while that in the other arm may remain unaltered, and the beat of the heart may maintain its normal character. These phenomena have now been observed by myself in a large number of cases, and I am quite sure that many of the symptoms mentioned, which have often been referred to some changes in the nervous centers—*i.e.*, to either the brain or spinal cord—are in reality due to the condition I have mentioned, viz. a derangement of the local circulation in consequence of a morbid state of the vaso-motor system of nerves. Nothing can far exceed the misery which some of these symptoms occasion; they often persist for years, or rather, occur paroxysmally for years, without finding any distinct or permanent relief from ordinary treatment of head, spine, and heart. They may, however, be diminished and entirely removed by the use of bromide of potassium, in such moderate doses as ten or five grains, taken twice or three times daily.

V. As to the *mode of action* of bromide of potassium we are not yet in a position to speak with certainty. Of these negations, however, there is abundant proof—1st. That it does not lessen the force or frequency of the normal pulse. Upon this point I have made many scores of observations, and have failed to find any exception to the rule stated, when the dose has been such as to produce only therapeutic effects. 2dly. The syphygmographic tracing of the pulse is perfectly normal in patients who have taken bromide in large doses for many months; and I have found it unchanged in the healthy adult by a dose of forty grains. 3dly. The temperature of the body has not under similar circumstances been reduced below the normal standard; but in some cases, where the medicine has been administered to those in whom there was slight pyrexia, a diminution of the abnormal temperature has been observed. 4thly. That bromide of potassium does not, in therapeutic doses, affect notably any of the secretions. Occasionally the amount of urinary water appears to be augmented, but there is no constancy in this result. 5thly. That it does not interfere with the reproductive functions of either sex.

The facts that I have witnessed would lead me to infer that the specific action of bromide of potassium is exercised upon the system of vaso-motor nerves, and that it acts upon that system as a "sedative,"—*i.e.*, that it reduces such morbid activity as would lead to the spasmodic narrowing of vessels, and the consequent induction of irregularity in the supply of blood. Contraction of the vessels forms by far the most important link in the chain of causes and effects in epilepsy and all allied diseases; it is obviously present in the class of cases to which I have referred in Section IV.; it is to be observed in those alluded to in Section III.; and it may be frequently recognized in those disturbances of sensation which were included in Section II. Moreover, it is quite clear that vascular contraction in one locality may be accompanied by, even if it does not cause, fullness of vessels in other situations, and that the symptoms most obvious to the patient may be those dependent upon the latter change. Thus, heat of head, and oppressive headache, are often found to co-exist with shivering and cold extremities. In such cases bromide of potassium may relieve, by controlling spasm of the vessels, and thus restoring the equilibrium of health. All theories, however, on the action of this drug are, at present, but of trifling value compared with that of the facts which demonstrate its practical utility.

VI. *Bromism* is induced in very rare cases by moderate doses; in a larger number of cases by the administration of the drug in great quantities. Its symptoms are—acne on the face, redness of the palate, epigastric heat, œdema of the mucous membrane of the mouth, and salivation, or bronchial catarrh; heaviness, drowsiness, and confusion of ideas, with irritability of temper and weakness of muscles; there is occasionally an ataxic gait, like that of commencing alcoholism. All these symptoms speedily disappear on the discontinuance of the drug.

Enough has been said to show that in the introduction of this comparatively new therapeutic agent into our Pharmacopœia, the profession and the public have received a great boon, inasmuch as they have met with a medicine, which, while absolutely devoid of all danger in its exhibition, yet exerts a most beneficial control over a large class of diseases confessedly among the most obscure and most obstinate of the ills to which humanity is subject.

SURGERY.

THE REMOVAL OF CANCER BY CAUSTIC ARROWS AND CARBOLIC ACID.

By J. R. Wolfe, M.D., F.R.C.S. Edin., Ophthalmic Surgeon to the Aberdeen Royal Infirmary.

I wish to bring before the Association two cases of cancer treated by caustic arrows and carbolic acid, both of which terminated favorably.

Case I. *Epithelial Cancer.*—J. B., aged 51, farm-servant, applied for advice at the Royal Infirmary, Aberdeen, in May, 1867, on account of a tumor in the inner canthus of the left eye. The tumor was about the size of a large walnut, rounded in form, hard, inelastic, and nodulated to the touch; immovable, being firmly attached to, and involving part of both eyelids; affected every now and then with attacks of lancinating pain. He stated that it began about nine years ago, in the form of a small wart at the inner angle; it remained nearly stationary for a considerable time, but some months ago it had begun to enlarge, and continued to progress rapidly.

On being told that it was malignant, and would require an operation for its removal, he left the hospital, and did not again present himself till July 3rd, at which time the tumor had begun to break up on the surface by ulceration; being covered with a crust, and having an ichorous discharge, of a slightly offensive smell, spreading and infiltrating the subin-

tegumental tissue. Examined with the microscope, it presented the ordinary characters of epithelial cancer. The awkward situation in which it was placed rendering it difficult of removal by the knife, without producing cicatrices which would have given rise to considerable deformity of the eyelids, I had recourse to the following procedure.

Five openings were made with a broad lance, into which caustic arrows were inserted; one of these was in the centre of the tumor; the other four were in the healthy skin round its margin; and the neighboring parts were protected by a patch of leather, having an opening cut in its centre of sufficient size to embrace the tumor. The whole was covered with a compress of dry lint and bandage. As the patient complained of no pain, nor any irritation, he was allowed to move about the ward as usual.

On the third day the whole tumor came away, leaving a grey-colored slough, which was detached in the course of twenty-four hours by the use of linseed-meal poultices. The surface now exposed was clean, and presented irregular elevations, which bled very readily. The gap left was so deep as to expose freely the inner wall of the orbit as far back as the middle of the eyeball. The surface was now painted with strong carbolic acid, and the whole covered by wadding dipped in glycerine. This treatment was continued for three days; by which time the bleeding elevations had disappeared, and the whole presented an uniform granulating surface. It was then covered with carbolised wadding dipped in glycerine; the dressing being changed every second day, and the wound washed with a weak solution of carbolic acid. Under this treatment, the gap filled up rapidly; and in a fortnight it was entirely healed.

In August I exhibited the case at the meeting of the North of Scotland Medical Association; when the skin about the inner canthus and eyelids presented its natural appearance, and scarcely a trace of cicatrix remained to show that loss of substance of such an extent had occurred.

I had an opportunity, quite recently, of examining the patient, and found the cure complete. The only traces (and these only to be observed on minute inspection) are: a slight elevation of the inner angle, as if the periosteum there were thickened, and the obliteration of the tearduct, which, however, does not give rise to any inconvenience.

Case II. *Cancerous Cyst.*—E. A., aged 68, domestic servant, was admitted into the Royal Infirmary, October 12th, affected with a hard tumor of the left inner side of the lower eyelid and cheek, measuring two inches and one-eighth in its largest diameter; of an oval shape, irregular and nodulated on the surface, and presenting the appearance of small abnormal vessels ramifying on its cutaneous surface, which was completely adhering. On puncturing it, there escaped a quantity of bloody serum and air-globules, which evacuation, however, did not diminish the size and hardness of the tumor. This fluid, when examined under the microscope, presented a mixture of cells and granules, but of so undecided a character as not to make it clear whether these were cancerous, or merely the products of an inflamed cyst; but the bulk of the tumor, etc., showed unmistakable characters of malignancy. The tumor was removed by caustic arrows, as in the last case, and dressed with carbolic acid. The patient was discharged in eighteen days, scarcely any appreciable cicatrix being left, and still continues well.

Remarks.—The advantages of this mode of treatment appear, as far as two cases prove anything, to be the following:

1. It is painless. Patients walked about the wards as if nothing had been done, and complained of no feeling of pain or discomfort whatever.

2. The tumor is completely eradicated; and, under the action of the antiseptic, which acts in the first instance as a caustic to the diseased tissue, healthy granulations are produced, which completely fill the gap, and leave little or no trace of a cicatrix.

This method appears exceedingly valuable for removing tumors from regions where no skin can be obtained from the neighborhood; and is also applicable to erectile tumors, nævi, cancer of the breast, etc., occurring in patients, places, or seasons of the year, when the use of the knife is to be dreaded.

On my mentioning the result of my cases to Professor Gosselin, he told me that for the last few years he had rarely used the knife for the removal of cancer of the breast in the Hôpital la Pitié, but regularly resorts to the use of the caustic arrows. The result is, that he does not now meet with cases of erysipelas, which used to be very common in his wards. He showed me several cases under treatment; but they were not sufficiently far advanced to enable me to judge of the appearance of the cicatrices, or to decide how much of the beautiful result above detailed is due to the carbolic acid, and how much to the arrows; in short, to determine whether the same result might not be obtained by the use of the knife and carbolic acid.

The arrows employed I obtained from the Pharmacien of Hôtel-Dieu, Paris, who prepares them by dissolving chloride of zinc in a little water, making a saturated solution, and mixing it with sufficient starch to make a stiff paste, which is rolled into a thin cake, cut into shape, and dried at 212 deg. Fahr. Although elsewhere I have claimed priority in the use in this country of carbolic acid as a dressing for wounds, yet I by no means wish to undervalue the great service rendered by Professor Lister to surgery in the systematic employment of it. Having seen its employment in Professor Lister's wards in the Glasgow Infirmary, I may be allowed to bear testimony to the skill, care, and originality, with which his experiments have been carried out.

Although not strictly belonging to the subject of this section, I may be permitted briefly to draw attention to a point alluded to in Case I. I have there stated that the obliteration of the lachrymal passage gave rise to no material inconvenience; and, adopting the ordinarily received doctrine that the tears are secreted by the lachrymal gland and removed by the lachrymal canals, sac, etc., one naturally asks why, in such a case, troublesome epiphora did not follow? But this view of the functions of these parts has been shown to be erroneous by repeated experiments and clinical observations. Magendi and Martini removed the lachrymal gland in animals, but found that the secretion of tears still continued. Cases where, in man, the lachrymal gland has been removed on account of disease, have been reported by Daniel O'Brian, Sir W. Lawrence, Graefe, and Paul Bernard; in all of which the conjunctiva remained moist, and in some even tears were secreted in such quantity, under irritation, as to flow down the cheek. It would appear, therefore, that the ordinary secretion is derived from the conjunctiva, and is not formed in larger quantity than can be got rid of by evaporation; while the lachrymal gland, like the salivary gland, to which it approaches in structure, secretes only periodically, and is intended to afford a large supply of fluid under the influence of irritation, when required to rid the ball of foreign bodies, as in cases of mental excitement. Hence, xerosis is not the result of the removal of the lachrymal gland, but is produced when the conjunctiva is extensively destroyed by granulations, removal of the eyelid, and the like.

Experiments.—In 1863, I repeated in my class the experiments of Magendi, Martini, and Donders, by removing, in the right eyes of two rabbits, both the lachrymal gland and the

gland of Harder, connected with the membrana nictitans. In both cases, the right conjunctiva remained as moist as the left, and, when dried by everting the eyelids and applying a dry cloth, became again moist in a few seconds. The application of irritants, such as ammonia, to the nostrils, produced precisely the same effect on the eye operated on as on the sound eye.

On two other rabbits I removed part of both eyelids and of the membrana nictitans; and, in both, although the eye was protected, in the one by drawing the ear over it and securing it in that position, and in the other by a screen of wire-gauze, the cornea became opaque in the part thus left unprotected.

These experiments I have recently repeated, and obtained the same result. My special reason for touching on this subject is, the recent publication by Mr. Z. Laurence, of some papers, in which he recommends the extirpation of the lachrymal gland for the radical cure of obstinate epiphora. The results of these experiments show, that the performance of such a formidable operation for that purpose, would, in all probability, prove of little value; and, therefore, I take the liberty of suggesting the propriety of making further investigations on this point before adopting such a procedure.—*British Medical Journal*, Sept., 1868.

THE TREATMENT OF WOUNDS UPON THE ANTISEPTIC AND SUBCUTANEOUS PRINCIPLES.

By William Adams, F.R.C.S., Surgeon to the Great Northern and Royal Orthopædic Hospitals, etc. Read before the Medical Society of London, March 2d, 1868.

I propose to submit to the consideration of the members of this Society, this evening, some observations on the antiseptic and the subcutaneous principles of treatment of wounds; and especially to show how far these principles may be relied upon separately, as guiding us in the treatment of different classes of wounds, and to what extent we should rely upon the two principles in combination.

First, then, with regard to the antiseptic principle, for the development of which into the system of treatment, based upon the "germ theory" of M. Pasteur, and applicable to extensive injuries and large lacerated wounds, such as in severe compound fractures, the profession is indebted to Professor Lister, of Glasgow.

It is true there is no novelty in the application of antiseptics to open wounds; and even the antiseptic which Professor Lister has selected—viz., carbolic acid—has been extensively employed by surgeons, and a large book on the subject of carbolic acid and its use in medicine, by Dr. Lemaire, had in 1865 reached its second edition; but still, as pointed out by Professor Syme, there is great novelty and originality in the method of applying the antiseptic adopted by Mr. Lister, as based upon the "germ theory" of M. Pasteur.

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The theory of M. Pasteur is simply this—that instead of regarding the septic or decomposing properties of the atmosphere as due to the oxygen and moisture, as generally believed; the decomposing properties are supposed to depend upon the universal diffusion through the atmosphere of minute organic molecules, which, by their development in the blood or serous exudation in wounds in which they are deposited, give rise to fermentative and putrefactive changes.

Mr. Lister observes:—"We know from the researches of Pasteur that the atmosphere does contain among its floating particles the spores of minute vegetations and infusoria, and in greater numbers where animal and vegetable life abound, as in crowded cities or under the shade of trees, than where the opposite conditions prevail, as in unfrequented caves or on Alpine glaciers....and it is peculiarly in harmony with the extraordinary powers of self-diffusion and penetration exhibited by putrefaction that the agents in this process appear to be 'vibrios' endowed with the faculty of locomotion, so that they are able to make their way speedily along a layer of fluid such as serum or pus." And in a footnote to this Mr. Lister observes:—"I have seen vibrios, so minute as to be only just discernible with the highest powers of an excellent microscope, shoot across the field of view with a velocity that astonished me."

The best general account of Mr. Lister's views is given in a paper read by him at the annual meeting of the British Medical Association in Dublin on August 9, 1867, and reported in the *British Medical Journal* September 12, 1867. In this paper he observes—"But when it has been shown by the researches of Pasteur that the septic property of the atmosphere depended not on the oxygen or any gaseous constituent, but on minute organisms suspended in it, which owed their energy to their vitality, it occurred to me that decomposition in the injured part might be avoided *without excluding the air* by applying as a dressing some material capable of destroying the life of the floating particles."

"The material which I have employed is carbolic or phenic acid—a volatile organic compound which appears to exercise a peculiarly destructive influence upon lower forms of life, and hence is the most powerful antiseptic with which we are at present acquainted.

"In conducting the treatment, the first object must be the destruction of any septic germs which may have been introduced into the wound, either at the moment of the accident or during the time which has since elapsed. This is done by introducing the acid of full strength into all accessible recesses of the wound by means of a piece of rag held in dressing forceps, and dipped in the liquid. This I did not venture to do in the earlier cases; but experience has shown that the compound which carbolic acid forms with the blood, and also any portions of tissue killed by its caustic action, including even parts of the bone, are disposed of by absorption and organization, provided they are afterwards kept from decomposition."

The facts placed on record by Mr. Lister are of course beyond question, and are, no doubt, a faithful record of cases treated upon the antiseptic principle advocated by him, and these results show undoubtedly a larger amount of success in wounds than is generally met with. But still I do not feel inclined to accept Mr. Lister's explanation of these successful cases as based upon the "germ theory" and caustic antiseptics. I believe, on the other hand, that for these brilliant results Mr. Lister is mainly indebted to the adoption of the subcutaneous principle, the patient under the advantages of the system recovering even from the effect of caustic antiseptic in addition to the injuries sustained.

One clinical fact which to my mind appears to be opposed to the "germ theory" is the frequency with which wounds, under apparently unfavorable circumstances, healed by the first intention, without inflammation or suppuration, which we should expect would more generally occur if suppuration depended upon organic molecules always floating in the air, and therefore always ready to enter wounds where they would germinate and promote putrefaction.

The practical question is whether antiseptics are to be employed upon the "germ theory" of M. Pasteur, and applied of caustic strength to the deep recesses of recent lacerated and contused wounds of large size, such as in severe compound

fractures, at the risk of causing further destruction of tissues and necrosis of bone; or whether they are to be used simply as antiseptics in a mild and unirritating form, with the sole purpose of preventing decomposition and putrefaction, such as would arise from exposure to the oxygen and moisture contained in the air, the healing of the wound being conducted essentially according to the subcutaneous principle—*i. e.*, the exclusion of the air by the mildest and least irritating means. My own opinion is strongly in favor of the latter view, and opposed to the application of caustic antiseptics.

This can only be determined when time has afforded other surgeons sufficient opportunities for deciding whether mild and unirritating antiseptics, applied to large wounds in combination with the subcutaneous principle of treatment, yield results equally as good as those reported by Mr. Lister as obtained by means of caustic antiseptic applications. I confidently anticipate they will do so, and observe that in a series of seven cases, including several severe accidents and injuries, treated by Mr. Syme upon the antiseptic principle, and recorded in the *British Medical Journal* of January 4th, of the present year, no reference is made to the employment of caustic antiseptics. Mr. Syme observes:—"The preparations employed by Mr. Lister, which have been adopted here, may be denominated carbolic oil, carbolic lotion, and carbolic paste. The composition of the first is carbolic acid and boiled linseed or other fixed oil, in proportion of one to five; that of the second, carbolic acid and water, in the proportion of one to thirty; and that of the third, carbolic acid and whitening, in the proportions requisite for the consistence of soft putty." In these cases the wounds were sponged with the weak carbolic lotion, which, in the cases of compound fractures, was also freely injected between the broken ends of the bones, and lint soaked in it applied over the wound, which was also covered with the carbolic paste. In some cases the carbolic oil was used instead of the lotion. The results were, in all the cases, unexceptionally good, and I cannot doubt but that this practice will be generally followed, embodying, as it does, in a scientific manner, the combination of the antiseptic with the subcutaneous principles.

To a certain extent it may be said that the practice is the same—viz., to exclude the air from the wound—whether this be done upon the "germ theory" or upon the theory of oxygen and moisture causing decomposition; but if the "germ theory" leads of necessity to the application of caustic antiseptics, then a wide difference in practice is at once established.

There can be no doubt that the greatest improvement in the treatment of wounds which has taken place in modern times, and that to which many lives are indebted for their existence, and by which many limbs have been saved, is the introduction of the antiseptic principle. Antiseptic lotions have now taken the place of water in the ordinary dressing, washing, and cleansing of wounds. We have, however, yet to determine by experience which shall prove to be the most efficient application, and amongst those generally in use are, the lotion of carbolic acid in the proportion of one part of the acid to thirty of water, or even weaker; Condy's fluid, which during the late wars proved so useful in army practice, and has long been in use in our general hospitals; and lime-water diluted with equal parts of water, which, in inflamed and suppurating wounds, I have been in the habit of using for many years.

Whilst fully admitting the importance of the antiseptic principle, with the exception only of the application of antiseptics strong enough to act as caustics, such as the strong carbolic acid applications sometimes used, I am desirous of submitting to the members of this Society that there are other applications and modes of dressing wounds of known efficiency; some of these owe their efficiency more to the subcutaneous than the antiseptic principle, whilst others depend more upon their combination in equal proportions of the antiseptic with the subcutaneous principle.

As examples of the first class in which the subcutaneous principle is chiefly relied upon, I would mention, first, the method of dressing wounds simply with their own blood and dry lint. In this method the great object is to avoid exposure, or, at any rate, long exposure, of the cut surfaces to the air; and in this way, if no water be used, the wound being dressed only with dry lint, and a light pressure maintained by a bandage, incised wounds of considerable size, such as remain after the removal of moderate-sized tumors, amputation of fingers, etc., may be brought into a condition nearly as favorable to the reparative process as in true subcutaneous injuries and operations. All surgeons are familiar with the facts that large incised wounds, when treated in this way, as they sometimes are by patients in the absence of medical aid, frequently heal by the first intention, which would not have happened had the wounds been longer exposed to the air, or if they had been washed with water.

Few practitioners have recognized the importance of excluding the air from open wounds, and still less have surgeons recognized the decomposing influence of water; but I may mention that for some time I have been in the habit of washing wounds with ether, instead of water, which I have found to contribute to the healing of many lacerated wounds, which appeared unlikely to heal by the first intention. Hippocrates, when speaking of the treatment of compound fractures says: "The wound is to be dressed in the summer with compresses soaked in wine; in the winter they should be dipped in oil, and the dressings will need renewal every day." I, for one, should certainly admit that, as a dressing for wounds, oil and wine are preferable to water.

Next to the simplest and most natural dressing of blood and dry lint is the method of dressing incised and lacerated wounds, even in compound fractures, with lint soaked in compound tincture of benzoin—the old Friar's balsam of well-deserved notoriety. This plan was based chiefly upon the subcutaneous principle, its object being by the exclusion of air to bring a compound fracture as nearly as possible into the same conditions as a simple fracture, but some of its advantages were undoubtedly due to the antiseptic properties of the tincture of benzoin. The late Mr. Bennion, of Oswestry, in Shropshire, adopted this plan, and obtained considerable reputation by his successful treatment of cases of compound fracture, accidents of frequent occurrence in this district. After setting the fracture, he covers the wound with a large piece of lint saturated with compound tincture of benzoin. He never disturbed the first dressing unless urgent symptoms indicated the necessity of so doing, and if such symptoms did not appear, he would allow the first dressing to remain for a month.

Another simple method of treatment, which owes its advantages chiefly to the subcutaneous, but in some degree to the antiseptic principles, is that of thickly covering wounds with collodion, a remedy which was long in favor till its advantages were eclipsed by Dr. Richardson's new discovery of his colloid styptic, which has far higher claims to the notice of the profession, in consequence of its fulfilling the combined indications of the antiseptic and the subcutaneous principles in a higher degree than any other application hitherto employed.

"The process of manufacture of the fluid," to quote from Dr. Richardson's lecture on the subject, "is tedious, but sufficiently easy. The object to be aimed at is to saturate ether entirely with tannin, and a colloidal substance, zylodine

or gun-cotton. In the first step of the process, the tannin, rendered as pure as it can be, is treated with absolute alcohol, and is made to digest in the alcohol for several days. Then the ether, also absolute, is added until the whole of the thick alcoholic mixture is rendered quite fluid. Next the colloidal substance is put in until it ceases readily to dissolve. For the sake of its agreeable odor, a little tincture of benzoin is finally admixed.

"When the solution is brought into contact with an open surface of the body, the resultant phenomena are these: The heat of the body gradually volatilizes the ether and the alcohol, and the tannin and cotton, as the ether leaves them, are thus left stranded on the surface in intimate combination. In proportion as the ether passes off, the blood or the secretion of the surface permeates the tannin and cotton; but tannin acts directly upon albumen, coagulating it, and transforming it into a kind of membrane, almost like leather. The cotton meanwhile unites the whole, gives substance to the mass, and adhesive quality. When all is solidified, the dressing becomes in fact, a concrete, having a true organic hold or basis on the tissues; and as the tannin, if the solution be freely applied, is in excess, any new exudative matter or blood is for several hours taken up by it, and the annealing is made the more complete.

"Thus, by this dressing the air is excluded from every possible point in every possible direction, not by a mere septum, but by the combination of the animal fluids with the remedy; and because the air is excluded and fluid is absorbed, there is no decomposition—*i.e.*, no oxidation; and because there is no oxidation, there is no irritation.

"In cases of compound fracture, after the parts have been brought into apposition as far as possible and fixed in the necessary position, the fluid should be poured slowly into the open cavity so as to fill it. Then the parts externally, should be covered with a layer of cotton-wool saturated with the solution.

"On open cancer, and on suppurating or decomposing surfaces, the solution may be freely applied with the brush, and afterwards, the parts may be covered with cotton wool saturated with the fluid.

"In no case need there be any fear that irritation will follow the application of the solution. On the contrary, the action of it is so purely negative that it might be considered a sedative. It is not such in the technical sense of the term, but it so effectually covers the wounded and susceptible surfaces as to maintain what is virtually a sedative influence."

I have now for more than a year used Dr. Richardson's colloid styptic in a large number of cases of incised and lacerated wounds, some of formidable dimensions, with complete success in a large proportion of cases. In two-thirds of the cases so treated, I can with confidence assert that union by the first intention has been obtained; or that the reparative process has proceeded either without suppuration, even in bad cases, or with the suppurative process reduced to a very insignificant amount, and in no instance have I seen any injurious effects. In about one-third or one-fourth of the cases, the styptic had to be abandoned in consequence of suppuration occurring, and antiseptic lotion relied upon.

The largest operation in which I have applied it—or rather I should say that in this case Dr. Richardson himself was kind enough to apply it—was amputation of the foot, by Chopart's operation, in a young gentleman aged nineteen years, for extreme deformity of the foot. To our delight we found it, three days after the operation, healed throughout, but, unfortunately, from the bandage adhering to one of the long ligatures, I, in removing it there, tore open the newly healed wound for the space of a quarter inch. At this broken spot about a teaspoonful of purulent matter formed two days later; but this little break was very quickly reunited, and on the sixteenth day after the operation the patient was able to return to the country with complete healing by the first intention, and without having suffered one symptom of a constitutional kind."

Another case was that of compound dislocation with fracture of the second phalanx of a finger, produced by a cricket ball at Lord's ground. The patient, Captain McN., came to me immediately after the accident, and after reducing the dislocation and applying three metal sutures, I applied the colloid styptic and bandaged the finger to a straight splint. On the fourth day finding no indication of inflammation, I allowed the dressing to remain, and did not remove it till six weeks after the accident, when I found the wound not only well cicatrized, but the callus was less than I expected, and some motion existed at the joint, which subsequently became quite free.

Another case was one of enchondromatous tumor, growing from the interior of the first phalanx of the third finger of the left hand of a young gentleman, Master K., upon whom I operated on April 3, 1867. My colleague, Mr. Gay, assisted me in the operation, and held the extensor tendon on one side, whilst I gouged out the growth from the interior of the bone, extending as closely as possible to the articulations at either extremity. I applied the colloid styptic to the interior of the bone, and, after applying metal sutures, painted the wound over with the styptic, and applied a little cotton wool saturated with it as a dressing. No suppuration occurred, and the wound healed completely under the first dressing, the boy recovering motion at both the articulations. Nothing could be more satisfactory.

Under my direction, a large number of incised and lacerated wounds, including many of considerable size, and many scalp wounds, have been treated by the application of styptic colloid, at the Great Northern Hospital, by Mr. P. Hopgood, the House Surgeon. * * * *

The methods of treatment and local applications to which I have referred, have mostly been considered in relation to their power of promoting union by the first intention in wounds of moderate size, or a reparative process without suppuration in wounds of greater magnitude. We have to deal, however, with wounds in which suppuration is already established, and with open ulcers of a more or less chronic character. To these, antiseptic lotions are especially applicable. But time will not permit of my entering upon this portion of our subject, which has of late derived additional interest from the study of the antiseptic principle and antiseptic remedies.

I would merely mention that among the most valuable antiseptic lotions are: carbolic lotion, made in the proportion of one part of carbolic acid to thirty of water, or probably one part in a hundred would be found strong enough for ordinary purposes; Condy's fluid, weak iodine solutions, and weak solutions of chloride of zinc; and also a lotion which has hitherto received much less attention than it deserves, viz., lime water, as well as solutions of potash and soda. I may add that the alkaline solutions have for many years been favorites of mine, and that it has been my practice to apply lime water constantly as a lotion to the surfaces of all ulcers and suppurating wounds; it cleanses the sore very quickly by chemically destroying all the pus cells and the secretion on the surface, and also diminishes the inflammatory congestion by its direct solvent action upon the fibrine of the blood in the distended capillary vessels, so that by endosmosis the condition of stasis of the red corpuscles in the capillary vessels is removed. I always use it of full strength in

indolent and sloughy ulcers, in which it acts most efficiently in deodorizing the ulcer, and as a slight stimulant; but in irritable sores I use it diluted with equal parts of water.

Lime water, in combination with oil, has long been a favorite remedy in cases of burns and scalds, and in combination with calomel as black wash, and with bichloride of mercury as yellow wash, has long been considered beneficial in many cases of specific ulceration; but, as I have generally considered the benefit to result from the lime water rather than the mercury, I have used it simply as an alkaline antiseptic lotion in this class of cases.—*Medical Times and Gazette.*

MIDWIFERY.

ON THE TREATMENT OF SO-CALLED "IRRITABLE UTERUS."

By Graily Hewitt, M.D., F.R.C.P.,

Professor of Midwifery and Diseases of Women, University College; Obstetric Physician to University College Hospital.

Nothing more graphic than Gooch's description of the pitiable condition of a patient laboring under that affection to which he gave the name "irritable uterus," can be well imagined; and there is little to be added under this head. But something has yet to be said as to the real nature of the affection giving rise to these symptoms, and on the important question as to the therapeutics of the disease; and I believe that we are in a position to go a few steps beyond the point at which Dr. Gooch left both the pathology and treatment of the affection.

Thus Dr. Gooch describes the affection:

"A young or middle-aged woman, somewhat reduced in flesh and health, almost living on her sofa for months, or even years, from a constant pain in the uterus, which renders her unable to sit up and take exercise; the uterus, on examination, unchanged in structure, but exquisitely tender; even in the recumbent position always in pain, but subject to great aggravations more or less frequently."

Dr. Ferguson, the able editor of the collection of Gooch's writings, not long since published by the New Sydenham Society, adds little to Gooch's description in the way of elucidation of the nature or treatment of the "irritable uterus," in the "Prefatory Essay." He expresses his belief that individuals with a tendency to gout or rheumatism, or who are the offspring of very nervous parents, are more obnoxious to it. Dr. Ferguson then goes on to say, "that another form, or rather another degree of it," has not been described by Gooch. "In this series," says Dr. Ferguson, "the purely nervous aspect of the malady is masked by some obvious change in the uterus or its appendages; but this change is by no means a constant one, either in its seat, extent, or nature. Sometimes there is a congested condition of the uterus, altering its shape into that of a retort, the enlarged and curved fundus being exquisitely sensitive of pressure. At other times the cervix, or some portion of the uterine walls, is the seat of congestion, of varying consistency, and of pain. In other instances the uterus may be entirely healthy, but the pain is referred to either ovary, or to some obscure spot in the pelvis itself. I have known the same general train of symptoms co-exist with every form of uterine ulceration, and without any of them; with every degree of uterine infiltration, and without any one of them; in a word, the local changes have been the fluctuating, the nervous affection the constant element." The further remarks of Dr. Ferguson on this subject, which extend to some length, are to the effect that local medication is not of the slightest use, and that it is extremely undesirable to encourage the patient to dwell on her sufferings; and, admitting the necessity for local treatment where "the local complications are clear and urgent," Dr. Ferguson was evidently impressed with the conviction that the cure of such patients must be left for the most part to time, the exalted sensibility being evidence of a general rather than of a local disorder.

This conclusion is, it must be confessed, a most unsatisfactory one; that it is an unsound one, I shall attempt to show.

In the second edition of my work on Diseases of Women, not long since published, I stated my belief "that some of Gooch's worst cases must have been really cases of flexion of the uterus." The matter cannot, however, end here. Further experience, together with a careful consideration of the whole matter, has led me to a more firm, and indeed a very decided opinion on the subject, and I now avow my conviction that the "irritable uterus" is nothing more nor less than retroflexion of the uterus of a marked form; that the symptoms present in the cases described by Gooch were due to the flexion in question; and that the symptoms so dependent can be made to disappear, and the patient be restored to comparative, often to perfect health, by remedying the defect, and by restoring the uterus to its proper shape.

For a considerable time past I have been looking for cases of "irritable uterus," but I have failed to find cases in which the symptoms described by Gooch exist *un*accompanied by marked change of shape of the organ. It did not for some time occur to me that such an acute observer as Dr. Gooch would have overlooked the existence of flexion of the uterus. I am, however, convinced, that this feature in his cases of "irritable uterus" either escaped his notice, or that, if he did detect it, he thought nothing of it. Dr. Ferguson, his commentator, comes very near the mark, for he speaks of a congested condition of the uterus, "altering its shape into that of a retort," as having existed in some instances. This fact is satisfactory, in so far as it shows that flexion of the uterus had been observed by Dr. Ferguson in association with the irritable uterus. It appears probable that Dr. Ferguson's attention having been at that period drawn more particularly to the state of the *os uteri* (as was then the fashion) in cases of disease of the uterus, the existence of flexion was only noticed when it was really so considerable as to obtrude itself, as it were, on his notice. And it is quite certain that Dr. Ferguson attached no particular importance to the flexion as a *cause* of the grave symptoms.

The evidence I have to offer, that the symptoms supposed to be due to the "irritable" uterus arise from retroflexion of the organ, is of the following kind. I have had several—I may say as many as fifty—cases under my notice at various times, in which these symptoms, in varions degrees of intensity, have been present. The descriptions given by Gooch of some of the cases might have stood for descriptions of the cases observed by myself, but in all of my cases I have detected retroflexion of the uterus, the organ having the form of a retort, in various degrees. On the other hand, having now had a very considerable experience of uterine disease, I can say with confidence that I do not recollect to have met with a single instance presenting typical irritable uterus symptoms *un*accompanied by the kind of alteration now alluded to. I have met with cases, it is true, where the uterus was tender to the touch, and also cases where, in addition to this, locomotion was painful, but never in the degree so graphically described by Dr. Gooch. I know not how more conclusively to prove the truth of the ideas which I have on the matter, than by the foregoing argument.

Why, it may be asked, does retroflexion of the uterus give rise to such excessive irritability of the organ? The answer to this will be, I conceive, as follows:—The flexion produces,

mechanically, engorgement of the uterus, interferes with the circulation within it, and compresses the nerves which course through its tissues. And the stretching and dragging of the peritoneum involved cannot be unimportant. It generally happens in these cases that a cursory digital examination gives an incorrect idea as to the locality of the tenderness, for when the examination is done gently, it will, as a rule, be found that the cervix is hardly, if at all, sensitive, while the slightest touch on the fundus of the uterus, which is now low down and displaced, and can be felt behind the vagina, gives the acutest pain to the patient, thus showing that the sensitiveness is localized. A rough push of the finger against the os gives pain because the whole uterus thereby undergoes concussion.

The importance of the flexion in those cases of irritable uterus where its *existence* has been actually recognized, has been grievously underrated, in consequence, as I believe of the doctrine and teaching of Gooch. And as the observations and remarks of Dr. Ferguson have only tended to confirm Dr. Gooch's view of the matter, it is not surprising to find, that even at the present day there is an indisposition to believe in the existence of a structural change of the organ in case of irritable uterus.

I am far from denying the importance of structural uterine lesions. But I hold that in a very large number of cases these structural changes are themselves the result of accidental alterations in the form of the uterus. Of this class of cases retroflexion of the uterus is a most marked instance. Here we have a distinct, palpable change in the outline of the uterus, resulting from a fall, a strain, or a soft condition of the organ, predisposing it to become easily changed in its form on application of a slight force. The organ becomes congested, painful, tender; motion aggravates the displacement, the pain increases, and the uterus gradually hardens, preserving the vicious shape it has thus accidentally acquired, and leaving the patient a sufferer, often—if unrelieved—for years.

Is it surprising, if such be the real state of the case, that applications of a caustic nature to the *os uteri* prove quite unavailing in removing the suffering? or is it to be wondered at that the uterus, if left in its flexed state, remains a source of perpetual discomfort to the patient?

A priori reasoning on the matter, however, would be comparatively unconvincing did it stand alone. But that what has been now put forward conveys the truth is further supported by the fact which remains to be stated, that having treated many such cases on the principle alone of reducing the flexion, I have found such treatment almost universally successful in removing the symptoms.

Of late years the question of the treatment of retroflexion of the uterus has received much attention, and, a confessedly difficult disease to cure, when in the chronic stage, much has been done and can be done to remedy it. The most satisfactory method of treatment, on the whole, consists in the application of pressure behind the cervix uteri, maintaining the cul-de-sac of the vagina behind the cervix in a high position in the pelvis. A modification of Hodge's pessary answers this purpose very completely. The one used by myself consists of an oval-shaped ring, the length of which varies accrding to the case, having a gentle curve adapted to that of the vagina. The upper part of the ring prevents the descent of the fundus backwards, and by degrees the flexion is rectified. In some cases a shortstem pessary can be worn in the uterine canal, and retained there by attaching it to the vaginal ring; but, on the whole, the other method is more generally applicable.

The patient suffering from "irritable uterus" then need not be confined to the sofa for an indefinite period. By the use of a ring-pessary well adjusted, locomotion is rendered easy and painless in by far the majority of cases. The tender, irritable state of the uterus subsides gradually, and we may hope even in the worst cases to restore the shape of the organ more or less completely. The uterine sound may be occasionally used to bend the uterus, but in the worst cases it cannot be tolerated at first. Maintenance of the horizontal posture is necessary in the worst cases during the first part of the time the patient is undergoing treatment.—*The Practitioner.*

MISCELLANEOUS.

PETROLEUM *v.* MALARIA.

[From Colonel A. Hopkinson, Agent to the Governor-General N. E. Frontier, and Commissioner of Assam, to the Secretary to the Governor of Bengal. No. 194, dated Shillong, the 3d of July, 1868.]

Sir,—I have the honor to submit a copy of an inspectorial report from Dr. Berry White, of the 44th Regiment Bengal Native Infantry, and also in civil charge at Dibrooghur, which contains a very curious and interesting notice of the unusual good health and immunity from malarious influences enjoyed by the imported laborers at the petroleum works at Makoom, near Jeypore, in Upper Assam.

2. It would be perhaps rash at present to accept any conclusion on the facts noticed by Dr. White. The number of persons whom they concern, and the period involved, are insufficient to connect cause and effect, and to say positively that the results are not simply casual coincidences; besides, I have been informed that the petroleum-working coolies are Dhangurs, who are said by some persons to be as impervious to malaria as Dr. White says the Cacharries are, but it seems to me that a case has been made out for observation and investigation, as well as a search elsewhere for corroborative evidence, and that it would be worth while to draw scientific attention to Dr. White's report.

3. Petroleum workings are now conducted pretty well all over the world, and probably at some localities as malarious as Makroom. Not to mention other places, I may refer to the oil and asphaltum works in Pennsylvania, Trinadad, Seyssel, and the Burmese petroleum wells at Renhangyoung, and it would be important to learn whether at any of them prophylactic effects of the nature indicated by Dr. White have been observed.

4. I do not know whether up to the present time any discovery has been made in regard to the nature of malaria which would rival in importance the obtainment of proof that it could not exist in an atmosphere charged to some particular extent with the vapor of petroleum oil.

5. The Burmese are in the habit of applying their "earth-oil" to the cutaneous eruptions to which they are liable, particularly Indian ringworm, but with little beneficial effect beyond allaying the itching.

[Extract from letter from J. B. White, Esq., Assistant Surgeon, in Medical charge of Troops, and Civil Surgeon, Dibrooghur, to Major R. Stewart, Deputy Commissioner, Dibrooghur. No. 25, dated Dibrooghur, June 15, 1868.]

It may not be uninteresting to notice here the unusual good health and immunity from malarious influences enjoyed by the imported laborers at the petroleum works. I made an especial point of inquiry into this in consequence of the extreme unhealthiness for which Makroom has been hitherto notorious. When there was a detachment of my regiment stationed there, the mortality was never under 20 per cent. per annum among the sepoys. Chiefly in consequence of this, on recommendation to Government, the post was taken over

by the police about four years ago. Since they have occupied it, it was found to be no less deadly to the Bengalees and Hindostanees of that force, and for the last two years, on my advice, Captain Hume has only sent to the place men who were either Douaniers or Cacharries, both races who are known to thrive rather than otherwise in malarious localities. As these Bengalee laborers could not possibly be so well cared for as the sepoys, I expected to find that the mortality among them would have been something appalling. I was equally surprised and gratified to find that it was all but *nil*, only one death having occurred in two years out of a population of over sixty persons; and that one was an old debilitated woman, who was allowed to accompany her friends. There was an increase by births of seven, and as many more expected within a short time. The infants born in the place all looked strong and healthy. This immunity from malarious diseases can, I consider, only be accounted for on the presumption that the gases, etc., given out by the petroleum exercise a protective influence against the effects of jungle miasma, which is supported by the fact that this mineral oil contains carbolic acid, or its elements, now recognized as one of the most powerful and effective disinfectants known. I further noticed that the coolies were quite free from ulcers or sores on the extremities, which is one of the greatest afflictions of the imported laborer, in Assam, and is very difficult to treat. In the tea plantations a leech-bite or any scatch or cut in most cases causes an obstinate ulcerous sore. Although these laborers get cut and bitten frequently, their wounds invariably heal rapidly, and, as their work necessitates their being up to their knees in oil for several hours daily, it is only reasonable to deduce that it is the oil which causes the cure.

I have noticed this to you, not for its scientific interests, but because it may be looked on as one of very considerable politico-economical importance to the future of the district; for if this speculation should turn out successful, which it promises to do, it is satisfactory to know that it will not be attended with the fearful loss of life among immigrant laborers which up to this has been incidental to every other branch of European enterprise in this province. — *Medical Gazette, October*, 1868.

BATHING.

The Royal Humane Society have followed up their valuable circular of directions for the resuscitation of persons apparently drowned, by a further paper drawn up by Dr. Sieveking and Professor Christison, on the subject of bathing. Though less within their function, the public are none the less under obligations to the Society for information which no one has thought of giving them elsewhere. The following, in substance, are the suggestions of the Society:—

Not to bathe until the stomach is empty; at least two hours after a meal.

Not to bathe when the system is debilitated by unusual fatigue.

Not to bathe when the skin is in a condition of perspiration, or immediately afterwards, but when the surface of the body is warm.

Not to bathe when chilliness is felt, nor to cool down the body by standing naked *either before or after* bathing.

Not to bathe at all if a short stay in the water, under the above conditions, be habitually attended with chilliness or numbness of the hands and feet.

Not to bathe, if the system be weakly, early in the morning, when the system has been many hours without support, but, if possible, about three hours after breakfast.

WOMEN AS PHYSICIANS.

An important step has been taken by the University of Paris. An American lady has received permission to present herself for the examination of the Faculty of Medicine in that University, and has already passed the first professional examination. The same permission is granted to English ladies, to whom, therefore, a fresh avenue to the medical profession is opened. The Paris M. D. Degree involves having passed the examinations for the Baccalauréat és Lettres, and the Baccalauréat és Sciences (or some recognized equivalent), and five medical examinations, besides having spent five years in medical study. Permission to attend lectures and hospital practice at Paris is also accorded to women. The programmes relating to the several examinations may be obtained, by order, from "Jules Delalain et fils, Rue des Ecoles, Paris." Two foreign Universities, those of Paris and Zurich, being now open to female medical students, those who wish to see women practicing as physicians are likely to have their desire fulfilled, irrespective of the action of English medical bodies. —*London Student, October*, 1868.

HOW TO STOP THE ADULTERATION OF MILK.

Dr. Charles A. Cameron, Professor of Hygiene in the Royal College of Surgeons, and Analyst to the City of Dublin, writes to us:—

I am very glad to learn that Dr. Lankester is analyzing the milk supplied by the London dairymen. For some time past, the milk on sale in this city has been examined on a pretty large scale. The officers of the Lord Mayor purchase samples, and submit them to me for examination. If I find them to be adulterated, the venders are summoned before the Lord Mayor, who invariably fines them. About sixty convictions have taken place during the last twelve months. At first, the adulterations were very numerous and very bad. In fact, there was hardly any pure milk on sale; and the proportions of added water varied from 16 to 60 per cent. Now, a large proportion of the samples analyzed are found to be pure; and the amount of water in excess of the normal proportion of that constituent is never more than 25 per cent.

I have never found any foreign matters in Dublin milk. The only frauds practiced upon it are the addition of water and the subtraction of cream.

In testing milk, the lactometer cannot be relied upon; for, although its indications are in general pretty accurate, they are often far from the truth. I have found some pure samples of milk to give only 7 deg. of cream; whilst, on the contrary, a mixture of 2 of milk with 1 of water, has yielded 13 deg. of cream in the lactometer.

The general price of milk here is 1s. per gallon; but some dairymen charge 1s. 4d., often without giving a better article. —*British Med. Journal.*

RELIEF OF PAIN IN OPEN CANCER.

The field for experience in cancer at the Middlesex Hospital is, as is well known, an unusually large one, and opportunity has therefore been afforded for testing fairly the action of remedies in affording relief in this distressing disease. We learn that the exquisite pain which belongs to open cancer is found to be best relieved by the stramonium ointment, which is employed at this institution. The following is the formula for this in the hospital pharmacopœa: Half a pound of fresh stramonium leaves and two pounds of lard. Mix the bruised leaves with the lard, and expose to a mild heat until the leaves become friable, then strain through lint. The ointment thus prepared is spread upon lint and the dressing changed three times a day.—*Lancet.*

ORIGINAL COMMUNICATIONS.

THE MIASMATIC DISEASES OF CALIFORNIA.

By J. CAMPBELL SHORB, M.D., San Francisco.

[Continued from page 103.]

In our last paper, which was designed simply as an introduction to a proper consideration of that form of miasmatic disorder known as the Town Fever, we sketched in a general way the prominent causes of the malady—causes which have become notorious, generally recognized as such by the profession, but not understood by the public at large, at least to the extent of inspiring them with a desire to avoid unhealthy localities, or to institute measures to reclaim them. We know the belief, more or less vague in its character, is widely entertained that in this city malaria of various degrees of concentration is found, but its site and causes are, even with a large number of the medical profession, buried in the deepest obscurity. The reasons are obvious enough. With the existence and operation of paludal poison are almost inevitably associated a high temperature, visible marshes filled with animal and vegetable matter in a state of decomposition, and certain peculiarities of soil supposed to favor the retention of water or moisture, and thus lengthen out the period during which the *materies morbi* is abundantly generated. No such incidents are observed here. We have a city, the temperature of whose climate the year round is comparatively low, lying on a sandy peninsula, upon which the winds from a cold ocean are forever playing, surrounded almost completely by salt water, perched on many hills, on whose steep sides water cannot long remain as a condition for the evolution of disease. It is very hard in the face of all these facts, directly opposed to an experience gathered in other parts of the world, to look upon our city as the abode of malarious exhalations of a singularly interesting and important character. Nevertheless, the fact is patent enough; we have here a disease whose inception, progress, symptoms, termination, and treatment, point unmistakably to its origin; and no matter how we may theorise on the subject, or how obscure or undiscoverable the hidden springs from which this morbid process draws its maintenance, its nature cannot be disguised or misunderstood; and as a corollary to this proposition comes the feasibility of its ultimate extinction, by the means which science plentifully supplies, when patient, earnest, fruitful search shall have revealed the object to which our remedies may be directed.

It may appear to a number of the physicians here that our effort to elucidate the complicated problem which forms the caption of the present treatise is like "carrying coals to New Castle." Still, even they may find their memories, already laden with facts touching this important subject, refreshed by the recital of an experience, which, though extending over comparatively a short period, has been earnestly and laboriously conducted. But we are not writing for them alone. We are daily receiving from the Eastern States, in fact from all parts of the world, new additions to the medical confraternity, to all of whom our miasmatic diseases will appear puzzling and intractable until experience, which is a slow teacher, shall have revealed their nature, and demonstrated the appropriate treatment. Besides, it seems our duty so to enlighten public opinion on such subjects as will enable it, when the opportunity offers, to appreciate the just value of any scheme of reformation, and by its pressure, which intelligence renders doubly forcible, effect its accomplishment.

As a necessary prelude to any efforts the profession may make to arrest the prevalence of this universal malady, it is imperatively necessary to consider all the causes, direct and indirect, from which it springs. In our last paper we spoke of such causes of disease as are evolved from the natural peculiarities of the surroundings where it occurs. As a type of such causes we may mention those natural but unwholesome reservoirs of water—lagoons—which are found to the north and east of the Presidio Road, beyond Polk street. These pools, which have no outlet, save in evaporation, are walled in from the bay by high mounds of sand, and receive during the prevalence of the winter rains the aggregated detritus of many hills—a complicated compound of animal and vegetable matter. When the rainy season is over, and the warm noons of summer come, these pools become foul, decomposition slowly goes on, and the surrounding atmosphere grows pregnant with poison, and moved by currents of air in many directions, it gives birth to a numerous progeny of miasmatic disorders.

In the production of such causes of disease man was entirely unconcerned. Malaria was generated in such localities when herds of wild cattle and elk browsed unmolested in Yerba Buena, before Sir Francis Drake dropped anchor in these waters—before the pious Fathers built their first mission, or asked their first blessing on the new El Dorado. But rolling to the west, following the light of the Star of Empire, or lured by visions of the sudden acquisition of fabulous wealth, a tidal-wave of emigrants has made populous these once lonely shores. By degrees they have learned that Nature, by some slight obliquity in her usual kindly care, has left exposed sources of distemper and of death in their midst. The Spirit of Progress is here with all its wondrous inspiration, and Science, responsive to the humblest invocation, offers her assistance. We feel sure they will avail themselves of these advantages, accomplish the little that Nature has left undone, and make this metropolis the healthiest city in the world.

Before we go on to speak of such causes of disease as flow not from any natural defects in our surroundings, but from such changes as public improvement has made necessary, it seems proper to call attention to one fact, the importance of which is beyond exaggeration. As one after another we survey the sites where waters still lie, or formerly laid, with probably only a crust of sand upon them now, and study the relations of these sites with adjacent localities, we are always struck with the facility with which they may all be drained, and at slight expense comparatively, considering the object for which such an expenditure would be instituted. Some time since we had occasion to make some inquiries respecting the relative height of certain portions of the city of San Francisco, and learned, on excellent authority, that Hayes Valley was forty feet higher above the level of the sea than Fifth street is at its junction with Market. Hayes Valley embraces a very large area of hundreds of acres, inclosed by Market, Larkin, and Turk streets, running back as far as Fillmore street. In this valley collected the waters washed down from the many surrounding hills, forming large pools, many of which have been filled in within the last five or six years. Until recently there was no escape for the water; and even now, though to a considerable extent it is hidden from sight, the soil is percolated, during the dryest portions of the year, to within a few inches of the surface, plenty near enough to assist in the evolution of paludal poison and its train of morbid processes. What is true of this portion of the city is applicable to every locality where we have been able to discover the malarious influence is felt, and with the fall it has in two directions, to the east, and to the south to Mission Creek, via Eleventh street, no one may experience any difficulty of realizing the facility with which

it may be drained completely, and made, as it really deserves to be, a beautiful and attractive feature in our city.

A most intimate knowledge of the topography of our city, to which we are not altogether a stranger, would be required to enable us to point out and describe all the sources of malarious influence that exist here, sources springing from a series of physical accidents, altogether unconnected with the presence or operations of man. These must be learned by experience, and the rule we laid down in our last paper comprehends all that is necessary as a point of departure for future explorations in this most interesting field of inquiry.

We propose now to discuss such causes of this morbid process as are, in part, the result of certain natural defects, and in part the outgrowth of changes established in conformity with the development and improvement of the city. Answering in every respect this description is that very concentrated malaria which is generated in the morass which, interrupted once or twice, commences at Valencia street, extending between Seventeenth and Eighteenth streets to Mission Creek. Some one or two years ago there was built across this morass an extension of Howard street—a causeway over which the cars now pass. This became a dam, and in order to give a vent to the large quantities of water which it was known would collect here, a culvert built of planks was thrown under the causeway. The enormous weight of stone and earth necessary to make the road a substantial one, pressing down upon the culvert caused it to weaken in the middle, while the extremities, free from any pressure, were canted up probably ten inches from the horizontal line, and as many above the level of the morass. This accident to the culvert involved the retention of a large quantity of water in the marsh above—parts of which were covered, and parts perfectly exposed to wind and sun. The stench which on still, warm nights in the past autumn rose from this locality was intolerable, and the malaria generated here was excessively pestilential. As violent a case of pernicious or congestive fever as has ever been our misfortune to attend occurred on the edge of this morass. The conflict between quinine, given in enormous doses, and the paroxysms was stubborn to a degree, and it was not until the patient was removed to a more healthy neighborhood that victory declared in favor of the former. Other morbid processes witnessed here, inflammatory affections of the pulmonary apparatus or the intestinal canal, intoxicated with the prevailing poison, became excessively difficult to manage. Relapses were of frequent occurrence; the attack took on the peculiarities of the Lernean Hydra, and seemed endowed with reproductive energies never witnessed before.

Any one whom business or pleasure has taken to the leeward of the Willows, beyond the Mission, within the last two or three months, will recollect the intensely sickening stench which seemed to load the atmosphere, proceeding from a collection of foulest water dammed by an embankment yet in the process of construction. A black, green scum had settled on the surface of the noisome pool, and on one occasion, when urged by curiosity to make a close inspection, we found the waters absolutely quivering with the motions of myriads of animalculæ, such as are always found in connection with putrefaction, and we almost shuddered when contemplating the ghastly pestilence, which, rising like a destroying Genius from the putrid waters, might stalk abroad, hurling defiance in the face of medicine, bringing death and desolation to innumerable homes.

Far be it from us to say aught against a ready co-operation with the promptings of the Spirit of Improvement. The miracles it has worked in revolutionizing industry, in ameliorating human suffering, and bettering in countless ways the condition of the human family, invest it with attributes almost too sacred for criticism, and while all petty considerations should yield to its resistless march, we have a right to put in our protest against the useless sacrifice of human life. The mighty chariot of Progress is not the car of Juggernaut, crushing to death whole armies of devout believers. Whirling through the ages with a noise and velocity grandly terrible, in the final consummation of its mission it is as harmless as the flight of a meteor: and when its path is marked by the destruction of human life, we may safely conclude the fault will always be found in the carelessness or culpable ignorance of mankind.

In the management of our improvements here, the least foresight exercised by that deliberative body to which the care of the public health is intrusted would shield us from every disaster involving loss of health and life. A strong stone culvert deeply laid under the Willows embankment, as a preface to the improvement there, would have made the work as free from danger as the blowing of flowers or the singing of birds.

We come now to consider another class of causes concerned in the production of the Town Fever—a class more circumscribed in its operations, but at times singularly deadly in its visitations. A great mistake has generally been made by the profession in supposing that a great extent of marsh is necessary to generate that poison which finds expression in the different miasmatic processes. Of course where large communities are prostrated through the influence of paludal poison, we will almost always find a large area concerned in its production; but this rule does not obtain in individual cases. We believe there arises from any given point of a marsh exhaling malarious miasmata, sufficient poison to affect the system, if the exposure be long enough, and we reject all such silly notions as would point to the aggregated miasmata of the entire marsh as the sole cause of the distemper. When individual cases occur, examination will reveal the cause sharply localized—circumscribed probably by a diameter of ten or twelve feet—overwhelming those who live within the immediate scope of the poisonous influence here generated, while the neighborhood enjoys perfect immunity from any such visitation. Though the cause be circumscribed, it gives rise to symptoms as formidable as those found in connection with more comprehensive causation, and its isolation may have the effect of leading the mind off from the contemplation of its exact nature and appropriate remedies. In the class of causes to which reference has just been made, are included all those which the ignorance or carelessness of man allows to be developed on his own premises, jeopardizing the safety of his own family, perhaps that of his immediate neighbors. These causes are legion, and in our attempt to point out the prominent ones as they have occurred from time to time to us, we are conscious of presenting only a guide which may enable others laboring in the same field to make valuable discoveries and most substantial additions to the fund of knowledge which we already possess on the subject. To be precise in the location of these causes, we may state they are found, as a rule, in the method of disposition of refuse water used in in families, the particular arrangement of water closets and privies, the condition of the foundation on which dwellings are built, residence in a room immediately over a space filled with damp air, closely confined, and the occupation of a chamber against one or more walls of which rest quantities of damp sand or earth.

We recollect attending a case of Town Fever singularly violent in its character, on one of the highest rocky eminences to be found in our city. We cite this case merely to demonstrate

that it is not only in the valleys and lowlands we must be prepared to meet this disease, but also in elevated localities, where health ought surely to reign—where the purest air from Heaven is constantly refreshing the atmosphere—"where," to quote the words of the poet, "every prospect pleases, and only man is vile;" vile, because he is constantly thwarting Nature in her efforts to render his surroundings perfectly healthy; vile, because he prefers filthiness and disease to cleanliness and health.

(*To be continued.*)

PATHOLOGY AND TREATMENT OF UTERINE DISPLACEMENTS.

By JOHN SCOTT, M.D., F.E.S.L., F.R.C.S.I., Etc..
Surgeon to the California State Women's Hospital.

Continued from Page 106.

In my previous paper I pointed out the necessity of distinguishing between retroflexions, pure and simple, where the uterus retains its mobility and is capable of being elevated by the sound to its normal position, and retroflexions when complicated by *adhesions* which have fixed the organ in its unnatural position. In the former the disease has been confined to the uterus itself, and with the removal of the affection which has caused the displacement of the latter, we may with absolute certainty calculate on its restoration to its natural position. Where adhesions exist the case is different; for if they are extensive, or of long standing, we cannot reasonably expect to restore the mobility of the organ by their absorption, and must content ourselves with such a removal of disease as will establish the proper discharge of its ordinary functions, and restore our patient to the enjoyment of health. If, on the other hand, the adhesions are recent and comparatively slight, it is beyond doubt that their absorption may be effected by a judicious treatment directed to the removal of the affection with which they are associated. The history of retroflexions, with interstitial deposit in the cellular tissue between the uterus and sacrum, will generally demonstrate the occurrence, at some previous period, of an acute attack of pelvic inflammation, frequently followed by abscess; the local symptoms and deterioration of the general health being of a severer character than usually attend cases free from such complications. It is in such cases that pessaries are so ill borne and attended with disastrous results, the reasons being so obvious, that I am surprised they have not more frequently attracted the attention of the profession. The *treatment* must be determined by the particular nature of the case which presents itself, for if evidence exists to show that inflammation is still present in the surrounding structures, any operation on the uterus, or the introduction of a sponge tent, will be productive of mischief; will, in fact, bring on an attack of pelvic cellulitis, with, perhaps, pelvic peritonitis, as will inflict the deepest suffering on the patient, and utterly discredit the attendant in her estimation. A careful preparatory treatment should be instituted, and the object aimed at should be the removal of all inflammation from the adjacent parts before any attempt is made to remove the uterine disease.

For this purpose it will be necessary to apply three or four leeches to the tender spot, and to repeat the application every third day, till all pain on pressure is removed. With this should be combined hot hip baths, injections of warm water and milk, rest in the recumbent posture, occasional free purgation, and the continued exhibition of gentle laxatives with small doses of quinine and iron. In the application of leeches, it is of importance that they should be applied to the *exact spot* where tenderness, with perhaps tumefaction, exists, and this will be accomplished by passing the leech glass *behind* the cervix and as high up as possible.

All inflammation having been, by the above means, removed, special attention can be directed to the uterus, and the operation for retroflexion, previously described in detail, may with safety be performed. Extensive induration, sometimes extending to the entire organ, but chiefly affecting the back wall, is not unfrequently met with in these cases; and incisions into the hardened structure promote its absorption while they straighten the canal itself. The medication of the interior is the same as that laid down for simple retroflexion, but will probably have to be continued for a longer time, with, however, an equally good effect. Where the adhesions are extensive or of long standing, the uterus will remain fixed, glued as it were to the sacrum; but in cases where the uterus was slightly mobile, and the adhesions were of a slighter character, I have found it possible to procure their absorption by a persistent use of internal medication.

In two cases now under treatment this happy result is taking place, and I am convinced the organ will eventually resume its natural position and retain it.

If the articles now contributed should prove interesting to the profession, it will afford me much pleasure to contribute to the pages of this journal a series of cases of retroflexions, from the records of private and hospital practice; and I now content myself with subjoining the following case, as sufficiently illustrative of the value of the treatment indicated:

Mrs. ———, aged 32, seen 30th September, 1867.

History.—Menstruated at fourteen; married at sixteen; one child, now living, born a year after the marriage; three years subsequently miscarried at six months; severe flooding and retention of secundines for some weeks; an acute attack of pelvic inflammation, succeeded by abscess; has never been well since.

Present state.—Patient sallow and emaciated; complains of general debility; local pains with a sense of dragging; vesical tenesmus; leucorrhœa; menstruation irregular, and so scanty as almost to have disappeared; constant headaches; dyspepsia.

Examination.—Uterus very low down, and completely retroflexed; perfectly fixed, and adherent to sacrum by extensive adhesions; the entire organ hypertrophied and greatly indurated; back wall especially so; tenderness on pressure at seat of adhesion; os patulous, and a glairy discharge exuding from it. On separating the lips, the lining membrane of cervix red, and denuded of epithelium; the retroflexion so marked that the sound had to be bent at almost an acute angle to allow of its entrance into the cavity, which was enlarged and painful to the touch of the sound; could not move the uterus in the slightest degree by the sound, aided by the finger, applied to the fundus posteriorly.

Treatment.—Frequent small leechings of the back wall of uterus with vaginal injections and hot hip baths; occasional purgatives, and small doses of hydrarg. bichlor. given till the gums were slightly affected. After the lapse of a month, during which the above treatment was persisted in, and a few days after the next menstrual period, the posterior flexion was divided, and an incision carried along the front wall of the cervix. By this operation the canal was straightened, and the incision having been kept open till the next catamenial period, sponge tents were introduced, and followed by internal medication as previously described; compound tincture of iodine, strong tincture of iodine, solution of permanganate

of potash, 20 grs. to the ounce, and carbolic acid with glycerine in the proportion of one to eight, were successively injected, while every effort was made to improve the general health by tonics and plain, but nutritious diet. The treatment extended over a period of six months, and its results may be briefly summarized. Local pains and leucorrhœa had disappeared; a healthy, painless, and free menstrual discharge was established; the general health improved steadily till it became perfect, and I had the satisfaction of seeing my patient gain flesh rapidly, and become capable of enduring any amount of physical exertion without injury. The uterus had greatly diminished in size, and was softer and had become very slightly mobile, but otherwise remained fixed in its position, and will, I believe, continue so. At this date she continues perfectly well, though it is but just to add that she is much disappointed at her continued sterility.

Here it may not be inopportune to say a word about sponge tents. Their value is undisputed, but it is frequently alleged that they are capable of greatly aggravating the evils they are intended to remedy, and that an attack of pelvic cellulitis not unfrequently attend their use. The fault lies not, however, with the sponge tent, the use of which cannot be dispensed with in the treatment of uterine diseases, but in the mode of its application. The introduction of a sponge tent, no matter how small a one, into the canal of a contracted and indurated cervix, is *always* attended with the utmost risk, and should never be practiced. The *induration should first be divided with the knife*, and if the incisions are kept from closing (as they are always inclined to do) by passing the sound frequently through them, the induration will become so far absorbed as to permit the introduction of the tent with perfect safety, and then will be displayed its singular power in removing the remaining induration, when combined with judicious medication of the cavity itself.

Another caution is necessary. In no case should a sponge tent be introduced *immediately* after incisions of the cervix. Metritis or metroperitonitis will be the almost certain result, and only after a reasonable time has elapsed after the performance of an operation can they be resorted to.

Induration and hypertrophy of the cervix have been hitherto looked on as most tedious to treat and almost impossible to remove, and certainly such is the case under the treatment generally pursued — namely, leeching, cauterization, local application of iodine, and local vesication. I can assure my brethren that I have never met a case of induration and hypertrophy of the cervix (schirrus, of course, excepted) which I have found impossible to remove by the following means: Free incisions should be made into the hypertrophied tissue, incisions commencing high up in the healthy tissue, and becoming deeper as they approach the os; the depth being proportioned to the requirements of the case, and kept from closing for at least a fortnight; subsequently sponge tents, at an interval of eight to ten days, followed by internal medication, and these means persisted in till all superfluous growth is removed. The incisions may at the time appear large, and leave an ugly gap, but so surely as the process of absorption and restoration goes on, they will contract in size till all traces of them ultimately disappear in the formation of a perfectly healthy os and cervix. As I stated in my first paper, I believe the great error in the treatment of uterine disease consists in the attempt to *localize* its existence in one segment of the organ, and that generally the lower one; and till we learn to recognize the uterus as a *whole*, in the pathological changes which ordinary uterine disease entails, we shall too frequently fail in curing it. In nothing is this more manifest than in the importance attached to erosions or ulcerations of the os, for which repeated cauterizations are supposed to be the principal remedy. Regarding these erosions as but the extension outwards of disease existing *within the cavity of the womb*, and considering it as both unscientific and unphilosophical to begin by treating the *effect* instead of the cause, I have long ceased to pay any special attention to them. The correctness of this view has been triumphantly demonstrated in my practice by the striking fact that, concurrently with the advance of the uterus to a state of health produced by medication of its cavity, the erosions heal up and disappear entirely, and that, too, without leaving the induration or contraction which so constantly follows the application of escharotics.

We hope to consider the subject of "anteflexions" in our next.

SOME OF THE USES OF BISMUTH.

By W. F. McNUTT, M.D., San Francisco.

One hardly knows how to reconcile the discrepancy in the testimony of physicians in regard to the remedial efficacy of bismuth. To look over all that has been written on its therapeutical effects, it would seem as if its virtue depended very much upon the imagination of the doctor or patient.

There is, it is true, a pretty general unanimity of opinion in regard to its beneficial influence over painful diseases of the stomach. But beyond that, the discrepancy, as to the diseases for which it should be used, and its therapeutics, is very great. Nor is its therapeutic action on the stomach satisfactorily explained. That it acts upon the stomach as a local anæsthetic seems pretty evident, from the rapidity with which it so often relieves gastralgia, spasm of that organ, etc., etc. But my own success with bismuth in the treatment of hysteria, hypochondriasis, diarrhœa, and disease of the heart, proves to my mind that it is more than a local anæsthetic to the stomach.

My experience of the administration of bismuth in the diseases just mentioned, has led me to believe that its efficacy in such cases is due almost entirely to its chemical action upon sulphureted hydrogen generated in the bowels. We never see a case of hysteria or hypochondriasis unless there be more or less flatulence of the bowels, and derangement of the digestion. Consequently we have sulphureted hydrogen generated when there is decomposition of the albuminous food. Flatulence of the bowels from sulphureted hydrogen, besides the inconvenience of the mechanical distension, produces that list of nervous symptoms—depression of spirits, headache, restlessness, etc., etc.,—by its absorption into the blood. The list of nervous symptoms which these patients complain of when their bowels are flatulent with sulphureted hydrogen, cannot be caused by the mere mechanical distension of the bowels. For instance, the distension is frequently comparatively slight, when the symptoms are urgent, and the same amount of distension, when the gas is disengaged from the decomposition of saccharine food, produces only the inconvenience arising from the distension. Neither is this derangement of the nervous system caused by indigested food in the stomach, for generally such patients suffer most several hours after eating, in fact, just before the next meal, when the stomach is evidently empty. Again, many persons who suffer greatly from painful digestion are comparatively free from pain in a couple of hours after eating. On the other hand, let the bowels be slightly distended with gases disengaged from decomposed albuminous food—sulphureted hydrogen—and the pain in the side, pain in the head, restlessness, sleeplessness, and depression of spirits, must be caused by the absorption of the gas. It must be the

poisonous effects on the nervous system of the absorbed sulphureted hydrogen, which causes the nervous derangement. This form of sleeplessness, when the patient complains of nothing perhaps but discomfort from slight flatulence, is generally made worse by opium, or it may make them sleep a restless sleep for an hour or two, when they will wake with headache, be more restless, feverish, and, perhaps, nausea. Sometimes the patient will go to sleep easily when retiring, and in an hour or two will awake to remain sleepless and restless the remainder of the night, with headache in the morning, and no apparent cause, except slight flatulence of the bowels, which seemingly gives him little or no discomfort. If during the night the patient takes opium, the symptoms are aggravated. But if in such cases the sub-nitrate of bismuth be administered in doses from gr. 5 to z. ½, the flatulence of the bowels disappears, the nervous symptoms are relieved, and the patient will generally enjoy a quiet sleep. In any case of nervous derangement, apparently due entirely to the flatulence of the bowels from sulphureted hydrogen, I scarcely ever fail at least to relieve the symptoms by administering bismuth. I frequently combine it with Dover's powder. Before using the bismuth for such cases, I was in the habit of administering charcoal with considerable success.

In organic disease of the heart, where the liver becomes congested and the secretion of bile suppressed, sulphureted hydrogen is generated from the decomposition of albuminous food. Every physician is familiar with the train of nervous symptoms that such patients exhibit—sleeplessness, restlessness, palpitation, pains, etc., etc., and flatulence of the bowels; and he also finds that the symptoms are aggravated by opium, while blue mass, etc., is also mostly useless. Believing that these nervous symptoms are due mostly to the poisonous effects of absorbed sulphureted hydrogen, I administer bismuth, and almost always succeed in quieting the patient. November 22d I was called to see a lady, with valvular disease of the heart (the mitral), in consequence of which the lungs and portal circulation were congested. She had violent palpitation, very nervous and restless, had been unable to sleep for several nights, had pain in the side, headache, and bowels flatulent and constipated, but passages very offensive. I administered bismuth freely, and on the 24th she reported herself as having had the best night's sleep that she had enjoyed for weeks, though a variety of medicines had been administered to her. I have a number of similar cases in my notebook.

I believe that bismuth not only destroys the sulphureted hydrogen present in the bowels, but is an antiseptic to albuminous matters, preventing their putrid decomposition. That bismuth destroys the sulphureted hydrogen present in the bowels, is proved by the fact thet if administered for a few hours in considerable quantity the flatulence disappears; and if a dose of oil is given, the evacuations are as black as tar, where the evacuations were natural or clay-colored before the bismuth was given. It is the chemical action of the gas upon the bismuth which gives the evacuations their black color. But a small portion of bismuth, when given in powder and in doses from gr. 5 to gr. 20, is dissolved in the stomach and absorbed. The remainder passes undissolved into the bowels, and while it may have some local anæsthetic action on the bowels as on the stomach, it will be comparatively inert, unless there be sulphureted hydrogen present.

Its action on the sulphureted hydrogen is more particularly demonstrated when given for chronic diarrhœa. Some have attributed to bismuth, astringent, tonic, and sedative properties, on account of their success with it in chronic diarrhœa. Others have given it for the same disease without the slightest benefit, and consequently have denied that it has astringent, or sedative, or tonic properties. While the fact is, that in cases of diarrhœa, that are caused or kept up by the poisonous effect of sulphureted hydrogen, I have given bismuth, combined with a few grains of Dover's powder, with more real benefit to the disease than any drug I could administer. Opium alone is useless, or worse. Charcoal, by absorbing the gas, has been, next to bismuth, the most beneficial. Chambers on Indigestions, says that it is "rare to find sulphureted hydrogen or hydro-sulphate of ammonia excreted without watery or soft pultaceous stools. They appear to be purgative poisons." They are not always purgative poisons.

I was called in October to see a child that was sleepless and irritable, and fretted and cried almost incessantly; its bowels were obstinately constipated and flatulent. The evacuations were clay-colored and very offensive to the smell. The child had been tried upon a great variety of food, and four or five wet nurses at different times had been procured for it without any apparent benefit, while a great variety of medicines had been administered with as little success. Finally we gave it gr. 11 of bismuth combined with pepsine, (pepsine had been among the remedies that were previously given) every fourth hour. The bowels became less costive and flatulent, and the evacuations very dark-colored. But when albuminous food, eggs for instance, was given, the passages were as black as ink. The child soon ceased to cry, and for the past four weeks has been well. Bismuth, if given for its anæsthetic effects upon the stomach, may be given in its liquid form—the liquor bismuth. If given for its antiseptic action in albuminous matters in the intestines, or for its chemical action with sulphureted hydrogen, it must be given in powder.

Bismuth is not an astringent, and acts as a sedative only indirectly; that is, it often produces quiet and sleep to a patient by its local anæsthetic action on the stomach or bowels, whose nervousness is produced and kept up by gastric or intestinal irritation. Or it is a sedative indirectly to those whose hysteria or restlessness is caused by the poisonous effects of absorbed sulphureted hydrogen. In the same way it acts indirectly as an astringent by controlling a diarrhœa that is kept up by sulphureted hydrogen acting as a purgative poison. It may be also said to be a laxative, when the constipation is apparently caused by the same gas.

BRIEF RECORD OF CASES.

By W. H. DAVIES, M.D.,

Assistant Surgeon California State Woman's Hospital, San Francisco.

CHRONIC INFLAMMATION AND INDURATION OF UTERUS—PROLAPSED OVARY—MUCOUS POLYPUS.

M. E——, æt. 37; admitted 18th October, 1867.

History.—Has been married eleven years, and has had one child. Has never been well since marriage; constant leucorrhœa; pain in right side; back ache; derangement of digestive organs; general debility; menorrhagia.

On examination the entire uterus was found hypertrophied and indurated; organ lying to the left side; left ovary prolapsed and tender to the touch; os patulous and a small mucous polypus projecting; no erosion.

Treatment.—The small polypus was snipped off with the scissors, and a free incision was made into the indurated tissue both anteriorly and posteriorly from the fundus to the os, after which a pledget of cotton soaked in solution of perchloride of iron was introduced. Subsequently the sound was passed

frequently to keep the incisions open, and the wound was dressed with carbolic acid and glycerine in the proportion of one to four. Sponge tents, followed by iodine injections, mercurial alteratives, and aperients. The induration and hypertrophy gradually disappeared, and the patient was dismissed perfectly well.

OCCLUSION OF OS, WITH CONICAL CERVIX AND VAGINISMUS.

C. E——, æt. 34; admitted 13th September, 1867. Married; no children.

History.—Has been ill for the last five years; menstruated at thirteen, but has never been regular, the discharge being always scanty and almost colorless; latterly it has almost ceased; dysmenorrhœa and constant leucorrhœa; severe pain in the back, and general ill health.

Examination.—Vaginismus; os uteri so contracted as barely to admit the introduction of the probe; cervix conical, and stricture of the canal about an inch from the orifice; no erosion.

Treatment.—The cervix was split with the scissors, and the stricture divided by Emmit's knife; carbolic acid and glycerine dressing, and the incisions kept open by frequently passing the sound through them; subsequently sponge tents, followed by iodine injections; alteratives and aperients, with tonics. On the 13th of November the patient was discharged in excellent health.

PROLAPSUS UTERI, WITH RETROVERSION AND ENDOMETRITIS.

A. B——, æt. 25; single; admitted 30th May, 1867.

History.—States that she first menstruated at sixteen, and that the discharge has been always scanty but not painful. Had a fall from a carriage seven years ago, and has ever since complained of bearing down, pain in the back and right iliac region, profuse leucorrhœa, and severe pain at the catamenial period; for the last seven years has been compelled to sleep with the head low, and a pillow under hips to obviate pain and sense of dragging.

Examination.—The uterus was found very low down and lying on floor of the pelvis; fundus retroverted; cervix elongated and conical, and very indurated; length of cavity upwards of three inches; loss of epithelium, and glairy discharge.

Treatment.—Recumbent posture strictly enjoined; warm vaginal injections and free purgation; free scarification of the canal of cervix. Subsequently half an inch of the cervix was amputated by the steel wire ecrasseur. There was no hemorrhage, and the wound healed kindly in a couple of weeks. Sponge tents, followed by iodine injections, completed the treatment, and the patient was discharged in August in excellent health.

Remarks.—I have had this patient under observation up to present time, and she continues well. I seldom amputate the cervix now, for I have found a free division, with subsequent medication of the cavity of the uterus, generally sufficient; under this treatment, the elongation (except of a very marked character) disappears, and while the os assumes a natural configuration, the canal diminishes in length.

LARGE CYSTIC TUMOR OF VAGINA—CHRONIC INFLAMMATION OF UTERUS—OS ALMOST IMPERVIOUS.

J. W. B——, æt. 35; married; has had no children; sallow complexion; very debilitated; admitted 10th December, 1867.

History.—Has been ill for the past seven years, with excessively painful menstruation, severe back ache, and leucorrhœa. Complains of great bearing down, and the existence of a tumor, which she has been told by her medical attendant was a falling down of the womb; has pain on menstruation, and the general health is completely broken up.

Examination.—A large cystic tumor was found occupying the right wall of the vagina, high up; tumor soft, and gave a sense of fluctuation, and so filled up the vagina that the os could scarcely be seen.

Treatment.—The tumor was punctured, and about four ounces of thick, glairy fluid was discharged. The inner wall of the cyst was very thick, and the cavity was smooth and shining; the incision was extended, and a portion of the cyst wall was snipped off, after which the cavity was injected with iodine. Afterwards it was found necessary to fill the cavity with cotton, and to paint it with a solution of potassa fusa, before complete closure could be effected.

The os uteri was found contracted, and the uterus enlarged and tender to the touch. The os was divided, and the canal of the cervix freely scarified, but the patient having contracted a return of severe intermittent fever, to which she had been subject, it was judged advisable to allow her to return to her home in the mountains, to recruit her general health. I have not seen her since.

SOMETHING ABOUT THE SMALL-POX EPIDEMIC.

By E. MALCOLM MORSE, M.D., San Francisco.

The fact that the small-pox prevailing here at present is of a malignant character no one will deny. Any one who has watched it must acknowledge also that it has attacked many of the so-called vaccinated, and a larger proportion than usual of the properly vaccinated. Like other epidemic diseases, there are years in which its type is mild, and years in which it is intense, highly contagious and malignant. The present epidemic belongs to the latter type; it resembles the small-pox in London in 1863, where the mortality was greater than had been known for twenty years.

Besides the *intensity* of the epidemic influence which we notice as characterizing the present disease, there are other powerful and predisposing causes which have been the means of spreading it, and which will, probably, spread it still more. One of these causes, which seems to have been unnoticed, is the known susceptibility to small-pox, in many instances, of *well*-vaccinated persons when they have come from one climate into another. This is the case with nearly all the adult inhabitants of this city. We have all come from a different climate, and many of us have thus lost, partially or entirely, our former vaccine protection; and for this reason *re-vaccination* is especially necessary in California.

This partial failure of vaccination, in many instances from the cause which we notice here, has been remarked upon, and proved to have taken place in other countries that are also washed by the waters of the Pacific Ocean. Seaton says: "The protection which vaccination gives against small-pox is seen in all races of mankind, and in all climates; but *change* from one climate to another, when that change involves considerable variation of temperature, would seem to render vaccinated persons in many instances more susceptible of small-pox. It is certainly often noted that persons get that disease soon after passing from a temperate to a tropical or very hot region—as from England to India—or, *vice versa*, especially when the cicatrices are not very well marked. The influence of climatic change is evident I think—though it is impossible to separate it from the influence of other and, no doubt, more powerful causes in the much more frequent

occurrence of small-pox among our soldiers employed in China, and among our sailors serving in China and Japan, than in any other section of the British army and navy. While the small-pox cases in the entire British navy, during the six years 1859–'64, were but 4.2 per 1,000 of the main force; and on the whole force, *if we except the East India and China squadron*, were but 3.1 per 1,000, the cases in that squadron exceeded 13 per 1,000. And during the same six years, while the cases of small-pox among the troops serving in the United Kingdom were less than 1½ per 1,000, they amounted among the white troops in China to nearly 6 per 1,000."

Another predisposing cause that gives many a victim to the epidemic, is the carelessness with which many of the poorer classes of native Americans have been vaccinated. The foreign born, whether European or Asiatic, and those Americans whose parents have had the means to command the services of intelligent medical men, as a rule, are well protected against this loathsome disease. Many of the poorer classes have been vaccinated by midwives, shoemakers, smart old women, etc., who have no idea what an efficient vaccine pustule is, or what its course ought to be. All they aim at is to make a big sore on the arm, and when this is done they are perfectly satisfied that the operation is successful. Many children have been vaccinated by them with crusts produced from re-vaccinations. In this connection there is a very important fact to be remembered, one which is generally overlooked. Incomplete vaccina or vaccinoid, leaves a person in a *most dangerous* condition, for, unfortunately, it is often just strong enough to keep him from being well vaccinated afterwards, and yet is not powerful enough to protect him against small-pox. Seaton, our great authority on these points, says, "No practitioner should ever allow himself to neglect or overlook any means in his power of making a primary vaccination perfect, under the notion that imperfection may be easily made right by re-vaccination. This caution is not offered without ample experience that it is called for—cases having come to my knowledge not unfrequently in which lymph had been used, of the efficiency of which the practitioner had himself doubts, in the belief that it *might* take, and that if it did not take, no harm was done, as it was easy to repeat the operation. And what has happened again and again under such circumstances has been this: the vaccination *has* taken, but it has taken badly; either at once, or at some not distant period, the vaccination has been repeated, and perhaps done a third time, but ineffectually (for it will constantly happen that spurious vaccination will *prevent* subsequent vaccination from taking effect properly); then no more is thought about it, or the child is declared 'insusceptible;' it grows up, gets small-pox, and very likely dies. Or, probably, the parents were directed to bring the child again at some specified time, and failed to do so, and the same fate as in the other case befalls it. Take it at the best, an originally imperfect or incomplete vaccination is a very great misfortune."

It is my opinion that a great deal of the vaccine virus which has been used in this city has been of this unsatisfactory and dangerous character. I consider that this bastard virus is more dangerous than the crusts taken off a syphilitic person, because it leaves the man, woman, or child, on whom it is used, entirely unprotected against this terrible scourge, and deprives us of all power of defending them against it.

Another cause of the spreading of the disease has been the imperfect manner in which many physicians have performed vaccinations. Still another cause has been that small-pox patients, until recently, have not been sufficiently isolated; and too many who have thought themselves protected have had access to them. Persons who had had the small-pox elsewhere, or who have been inoculated in the "*old country*," or who have several good cicatrices on them, ought to be informed that on account of the change of climate some of them will take the disease, and unless they have business with the sick man they must keep away from small-pox.

Having briefly enumerated the principal causes that have produced the epidemic, I will here state the best means, in my opinion, for removing them. The old axiom, *sublata causa tollitur effectus*" ("take away the cause and the effect ceases"), applies as well to this epidemic as it does to other things. The first step in the right direction is to procure efficient and sufficient vaccine virus, and to use, and permit to be used, only the very best matter. A board of five distinguished physicians, who have the confidence of our community, has very properly been appointed for this purpose. In order to facilitate and expedite the work of the vaccinators appointed by the city, a health officer (and I believe there has already been appointed one for each ward), or a policeman should be detailed to assist each vaccinator. It should be this person's duty to go about in the ward from house to house, and send a certain number of men and boys to the physician of that ward, every day, as many as he can vaccinate during office hours; giving him a list of the persons he has ordered to appear for that day; those who refuse to come can then be fined. The women and children can be vaccinated at their own houses. The object of having a health inspector or a policeman to assist the ward physician can be easily understood. It saves time, and will enable him to vaccinate four or five times the number that he could when unassisted. During office hours, under the present system, often two or three days pass without a single call for his services, and much valuable time is thus lost. If the physicians go about from house to house, the delays and questionings are innumerable. They do not know whether the gentleman of the house would like them to be vaccinated! Is the vaccine matter good? where did he get it? what is the use of vaccinating when the prevailing disease is black measles? did the pock come from a child? where did the child live? etc., etc. If a health officer, or a special or detailed policeman, would notify the inmates of twenty or thirty houses that the public vaccinator of that ward would be there at or about a certain hour, for the purpose of vaccinating them according to law, much valuable time would be saved. Unless there is an officer of this kind with the physician, whose duty it is to report all refusing to be vaccinated, there will be very few persons reported, and compulsory vaccination can never be enforced.

A NEW HAIR DYE.

Dr. McCall Anderson, in a recent paper, says: "During the treatment, I accidentally discovered what promises to be the most perfect black dye for the hair which has been seen.

After having used the bichloride lotion for some weeks, I changed it for the lotion of the hyposulphite of soda, and the morning after the first application the hair of the part, which before was bright red, had become nearly black. One or two more applications rendered it jet black, while neither the skin or clothing were stained. I saw this patient a couple of weeks later, and there was not the least deterioration of color, although of course, as the hair grows, the new portions will possess the normal tint. He was by occupation a Turkey-red dyer, and was much interested in the discovery, though rather grieved to find, what medically must be considered one of its greatest advantages, that it did not dye the linen, and was therefore unavailable for his purpose."

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SAN FRANCISCO, JANUARY, 1869.

☞ *All letters and communications to be addressed to the* "Editor California Medical Gazette," care of A. Roman & Co., San Francisco.

January 1st, 1869.

We much regret that we were unable to bring out our Gazette last month, and we tender our sincere apology to our subscribers. The only excuse we have to offer is the simple truth—we were so much overwhelmed with other business that we had not time.

This kind of proceeding, and this kind of apology, is, we think, without precedent. Subscribers at home, may grumble; but those abroad will, perhaps, excuse us, in the idea that the fault is a venial one in a Californian.

OUR "GREAT MORTALITY."

With the light of history, and the records of medical literature—with what has been already written, and what is known to be sound medical opinion by the intelligent public of San Francisco, and in face of what they have been orally taught by those in whom they have confidence—we say that it is a sin and a disgrace that the small-pox continues its work of devastation amongst us.

For more than half a year the number of victims for each month has steadily increased—beginning with twenty in June, it reaches one hundred and forty-eight in December.

More than half a thousand people hurried in six months to "Lone Mountain" by a preventible disease! It seems no use trying to teach Supervisors, Health Office, or Health officers; the people themselves must do the work with the energy and determination that the people of California have ever shown when necessity has compelled them to grapple with any great evil, or overcome any great difficulty.

When every man goes to his daily work with an inward fear—when death is bringing sorrow to so many hearts, and so many are untimely cut off in their prime—when even commerce is in danger of being paralyzed by this resistless foe—it is really an insult to common sense, a mockery to experience and intelligence, to play experimental farces—to work with feeble weapons — when record upon record, when unquestionable testimony, undeniably proves that the ready antidote is before us.

If we were writing for the public we should tell them what this ready antidote is—what is the truth that is in us; we should appeal to them in the name of humanity and common sense to take the matter into their own hands, and not rely longer on those who have the power, but apparently not the knowledge to stop the pestilence; we should tell them that a thousand tongues have said again and again, and recorded experience has verified the utterance, that universal vaccination and revaccination is the only remedy and the very ready antidote; that prudence has suggested the necessity of disinfecting the house and clothing where an infected person has been, and that while infected he should be kept as isolated as possible. But we write to the profession, and we are sure there is not an intelligent member of it in San Francisco who does not believe that if these measures were put effectively in force, that the disease would not only be "*stamped* out," but *rooted* out in less than a month.

Well, why has it not been?

We do not wish to be personal in our fault-finding; but our authorities—the Supervisors, the Health Office, and the Health officers—have not met the foe with the proper weapon; they have gone out with a "sling and a stone," but their hands are not the hands of David—and the sling and the stone is a feeble weapon in unanointed hands.

Speeches and letters, showing plausible ignorance, self-sufficiency, and half-educated conceit—pumping water into sewers, and sending round a cart evolving chlorine gas—are far punier weapons than a tiny lancet with a drop of vaccine lymph. This is the weapon which is sure to kill the small-pox.

With shame we confess that this long continuance of the small-pox is an *infamous* disgrace to us. We do not mean to the medical profession, for as a body they have no power; we believe each individual has done his duty; the blame, the sin, lies with the authorities we have mentioned, because they have not long ago enforced the power a State ordinance has already given them, of appointing physicians for house to house vaccination, and *compelling* each and every one to be vaccinated who has not been so during the present epidemic.

It is a work of supererogation to say anything to an informed mind as to the paramount importance and urgent necessity of such a measure as this. Some we know may deny, may doubt. In answer to those, all we have to say is, some people deny the existence of an Almighty, and some doubt a future existence.

HOSPITAL INVESTIGATIONS.

We have no doubt but that the patients of the City and County Hospital feel very grateful for the investigation that has taken place on the grounds of their complaint. We believe that had the same method of investigation been adopted in regard to the Small-pox Hospital, the suffering of the patients would have been sooner relieved, and that patients would be much less prejudiced against being sent there. Still, we cannot but think that it is unwise to give publicity to every story which any patient or nurse may choose to concoct when leaving a hospital, especially a small-pox one, which, at best, must necessarily be, as far as domestic comfort is concerned, an undesirable abode.

The patients of the City and County Hospital have cause to congratulate themselves that their wrongs have been so promptly righted. And for our own part we are glad that they have been righted, at no very great sacrifice other than that of an eclectic dietary system. But the fact is, the stomach is a very matter-of-fact kind of organ. No matter to what extent a dietary system may inflate the imagination of its author, the wail from the stomach will be loud and long if the scientific system fails to supply its wants. Besides, it has no confidence in scales or weights to determine the quantity and quality of food it shall consume.

We have very little doubt but that the patients will be as well cared for and as comfortable as it is possible to make them in that building, which, out of compliment, we call a hospital. It is a patent fact that the whole system, building, and all, is a disgrace to the wealth, size, and progressive spirit of this city. We hope that when our visits East are made overland, that Californians will call at Chicago, and that her public buildings and the enterprize and progressive spirit of her public men will remind them that if they are not up and doing, there will be a greater wonder in the world than their boasted San Francisco. There is no reason why San Francisco should not have a hospital that would be comfortable for patients, and at least not a reproach and disgrace to the size and wealth of the city.

REVIEWS.

Diseases of Children. A clinical treatise based on lectures delivered at the Hospital for Sick Children, London. By Thomas Hillier, M.D. Philadelphia: Lindsay & Blakiston. San Francisco: A. Roman & Co.

Dr. Hillier, as physician to the Hospital for Sick Children, in Great Ormond street, London, has ample opportunity for studying their diseases, and this book is an evidence that he has done so in a patient and philosophical manner. He has given us "a series of short monographs" on some very important diseases; but not a systematic treatise, including the entire range. The articles on tuberculosis, acute and chronic hydrocephalus, are especially worthy, and contain much valuable experience.

Dr. Hillier contends that croup and diphtheria are one and the same disease. In maintaining this view, he takes up the statements made by two late and eminent English writers—Dr. Jenner and Mr. Squire—in Reynold's "System of Medicine." Dr. Jenner insists "that croup is a local disease, not contagious; that it does not occur as an epidemic; that it does not affect any large proportion of adults; that there is no albumen in the urine, and that there are no symptoms of disordered innervation consequent upon it."

Mr. Squire maintains that the distinction between the two diseases "is based mainly on the condition of the mucous membrane, upon which the false membrane is deposited. "In diphtheria," he says "there is interstitial necrosis, or ulceration of the mucous membrane immediately beneath the exudation; in croup the execution is free, and there is no such lesion of the membrane."

Dr. Hillier contends that it is as impossible to maintain that croup is merely a local disease as that pneumonia is merely local, or catarrh, both of which are generally indications of a morbid constitutional state. He says as to contagion: "Diphtheria is observed to be contagious only when an epidemic prevails, or when a number of cases are brought together in an ill-ventilated hospital. Croup, as well as diphtheria, has been described as epidemic; sporadic diphtheria is not uncommon. Albumen has been found in the urine of patients with croup; it is only quite recently that it was found in diphtheria. The other two points (its frequent occurrence in adults and the symptoms of disordered innervation) have most weight in establishing a distinction; but in reference to these it must be remembered that when diseases become epidemic they are more liable to attack adults who escape when the disease is only sporadic; and that a certain set of symptoms often prevails in the epidemic which has been absent in other epidemics of the same disease."

The book is enriched by the record of many clinical cases well narrated, and by the addition of a well selected formula for medicines.

Books Received.—"Flint's Practice of Medicine," 3d edition; "Marshall's Outlines of Physiology;" "Ellis's Medical Formulary;" "Banning's Mechanical Pathology and Therapeutics;" "Physiology and Hygiene," by J. C. Dalton, M.D.; "The Opium Habit;" "Atlas of Venereal Diseases, by Cullerier and Bumstead." These works will be reviewed in our next number.

CURRENT LITERATURE OF THE MONTH.

MEDICINE.

A LECTURE ON THE ACTION OF BLOOD-LETTING, HEAT, COLD AND IRRITANTS, IN THE TREATMENT OF DISEASE.

By George Johnson, M. D., F. R. C. P.

Physician to King's College Hospital; Professor of Medicine in King's College, etc.

I purpose, upon the present occasion, to direct attention to certain general principles, which may serve as guides for the employment of remedies which act by altering the amount

and the distribution of blood in the vessels—I mean blood-letting, general and local; hot and cold applications, and counter-irritants.

And, first, I will speak of *venesection.* This powerful remedy, which in times past has been much employed, and in many cases, apparently, with excellent results, has, during the last thirty years, fallen into disrepute. It is not now my intention to discuss the question whether this disuse of a once popular, and always a powerful method of cure, has been the result of a change of type in inflammatory disease. This question has been very ably argued, and answered in the negative, by Dr. Hughes Bennett ("The Principles and Practice of Medicine"), and by Dr. Markham ("Bleeding and Change of Type in Disease"). Sir Thomas Watson, who, in the last edition of his "Lectures," had expressed his opinion that "there are waves of time through which the sthenic and the asthenic characters of disease prevail in succession, and that we are now living amid one of its adynamic phases," has, with characteristic candor, in a published letter addressed to Dr. Markham, expressed his suspicion that, in the sentence above quoted, he ought to have spoken of successive waves of *opinion*, rather than of *time.*

It appears, then, that, while medical opinions and medical practice have fluctuated, the diseased state which we call inflammation, and the constitutions of our patients, have remained essentially unchanged. Great errors have been committed in past times by excess in bleeding, and now the tendency is to the opposite extreme—to neglect venesection entirely, even in cases which admit of unquestionable relief from this practice. We are now suffering from an epidemic of *hæmatophobia.* A fashionable and very eminent physician said to me lately, "It is so long since I have prescribed leeches, that I have forgotten the Latin name for a leech!"

This irrational rushing from one extreme to another, under the influence of fashionable impulse, this drifting upon the waves of opinion without rudder or compass, is equally discreditable to us as a scientific profession, and disadvantageous to our clients. It is well worth an effort to avoid this scandal for the future.

It may be laid down as a general principle that the object of blood-letting, whether general or local, is to abstract blood, either directly or indirectly, from vessels which are overfull, and to promote its more equal diffusion through the system. And, more particularly, the main object of venesection is, to lessen over-distension of the venous system, under which term I include all the vessels that contain black blood, the systemic veins, the right cavities of the heart, and the pulmonary artery. It will be found, on a careful inquiry, that all those cases in which the most striking relief has been afforded by venesection, are characterized by an impeded circulation through the lungs, and a consequent distension of the venous system. This proposition has been advocated and illustrated with much ability by Dr. Markham, in the treatise already referred to.

I will relate, in a few words, a typical case. At the end of September, 1866, during my visit to the hospital, one of the sisters came to tell me that a woman who had just been admitted into Twining Ward was dying. The patient had chronic renal disease, considerable anasarca, with the physical signs of engorgement of the lungs and of liquid in the left pleura. She was gasping for breath in great agony; the face was blue; the eye-balls prominent and watery; the jugulars much distended. She was apparently dying from over-distention of the right side of the heart. I asked Dr. Fenn, the house-physician, to open the jugular vein. About ten ounces of blood escaped. As the blood flowed, the distension of the veins was seen to subside; the breathing became easier before the blood had ceased to flow; in ten minutes the dyspnœa had passed away, and it did not return, She died three weeks afterwards, gradually worn out by the results of advanced renal degeneration.

Dr. John Reid proved, by experiments on dogs which were killed by various methods, but all involving apnœa and a consequent blood-stasis in the lungs, that opening the jugular vein, by lessening the distension of the right side of the heart, has the effect of increasing its contractile power, and so assisting the circulation.

We shall find this principle is applicable to nearly all those cases in which pure empiricism has led to the practice of venesection, with apparently the most satisfactory results. These cases include some forms of inflammatory disease, and others of a non-inflammatory nature. They comprise cases of pneumonia, pleurisy, and bronchitis, in which the respiratory capacity of the lung has been suddenly and greatly reduced below the requirements of the blood to be aerated, and where, consequently, there is a continual tendency to a serous effusion into the bronchi of the healthy lung-tissue; cases of apnœa, the secondary result of brain disorder—in other words, some cases of apoplectic and of epileptic coma, in which the true object of venesection is not to arrest cerebral hemorrhage or to lessen cerebral congestion, but to relieve the oppressed right heart, and so to help on the circulation, first through the lungs, and then through the systemic arteries.

And here it is important to observe, that a full and strong pulse, which, in past times, has been looked upon as an indication for the practice of venesection, is rarely present in those cases in which the practice is known to have been most successful. Obviously, the true indication for venesection is not fullness of the *arteries*, but overfullness of the *veins;* and, inasmuch as this overfullness of the veins is a result of an impeded transit of blood from the venous into the arterial system, it is manifest that the arterial pulse will be the smallest and the feeblest in some of those cases in which venesection is most needed to relieve the over-distension of the venous system; while the effect of venesection will be to increase the volume and the power of the arterial pulse. In no class of cases has this been more strikingly shown than in some well authenticated cases of cholera collapse, in which venesection has been attended with the happiest results. In illustration of this, I may quote the following striking case, which has been recorded by Sir Ranald Martin. (The Influence of Tropical Climates on European Constitutions, 6th ed., p. 349.)

"On visiting my hospital in the morning, the European farrier-major was reported to be dying of cholera. His appearance was surprisingly altered; his respiration was oppressed; the countenance sunk and livid; the circulation flagging in the extremities. I opened a vein in each arm, but it was long ere I could obtain anything but trickling of dark treacly matter. At length the blood flowed, and by degrees its darkness was exchanged for more of the hue of nature. The farrier was not of robust health; but I bled him largely, when he who, but a moment before, I thought a dying man, stood up and exclaimed, 'Sir, you have made a new man of me.' He is still alive and well."

The reports of the Indian practitioners abound in cases like this, showing, as the immediate results of venesection, a relief from dyspnœa and cardiac distress, and an increase in the volume and force of the arterial pulse, while the blood, which had nearly stagnated in the veins, and had consequently become dark and viscid, quickly assumed its natural color and consistency, when the disengorgement of the oppressed right heart had increased the freedom of the circulation.

Bell makes the following statement (Treatise on Cholera

Asphyxia, p. 118): "The effect of blood-letting would, indeed, sometimes appear almost miraculous. A patient will be brought in a cot, unable to move a limb, and, but that he can speak and breathe, having the character, both to touch and sight, of a corpse; yet will he, by free venesection alone, be rendered, in the course of half an hour, able to walk home with his friends."

Rogers gives the following description of the effects of venesection by a medical man who was himself the patient: "There was a sensation which I am at a loss to describe, as if my heart was ceasing to beat, and a dread of suffocation; this sensation was instantly relieved by bleeding, and I recovered immediately." (Reports on Asiatic Cholera in Regiments of the Madras Army, by Samuel Rogers, p. 259.)

Here I would say emphatically that I look upon venesection not as a cure for pneumonia, or pleurisy, or bronchitis, or for apoplectic or epileptic coma, or for any of the various forms of apnœa, or for the collapse of cholera; but only as a means of mitigating one of the accidents of those various morbid states; namely, a paralyzing over-distension of the right heart and the whole systemic venous system. If we can satisfy ourselves that this state of the venous system exists to a degree that perilously interferes with the onward flow of blood, then we need not be deterred from having recourse to venesection by the general feebleness of the patient or by the special weakness of the arterial pulse. The object of venesection in all these cases is, by abstracting a certain quantity of nearly stagnant venous blood, to promote a more rapid and a more abundant supply of arterial blood to the tissues; and, amongst other tissues, to the muscular walls of the heart itself. For it should be borne in mind that an impeded circulation through the lungs necessarily involves a defective blood supply to the coronary arteries, and a consequent loss of muscular power in the heart's walls, quite apart from the paralyzing over-distension of the right clavicles.

When an obstruction in the larynx threatens fatal apnœa, in considering the question of tracheotomy, we take little note of what may have been the patient's previous condition of health and strength. The main question for consideration is, whether an opening in the trachea will remove the state of apnœa and the consequent asphyxia; and we act accordingly. So, with regard to venesection, while moving blood is the life of the body as a whole, and of each particular part, stagnant blood is death, whether general or local. If then, by the withdrawal of blood from overgorged vessels, we can promote the movement of that which remains in the system, we effect a renewal of life, and we afford a physical illustration of the great doctrine that life may be lost by saving it, and saved by losing it.

These being, as I conceive, the true principles which should guide us in the practice of venesection, we see plainly the mischievous absurdity of the practice, which prevailed not long since, of bleeding a patient before a surgical operation, in order to prevent subsequent inflammation, and of bleeding persons in health periodically at certain seasons, to obviate a possible tendency to disease.

Local Bleeding.—I have long been convinced, by observation and experience, that local bleeding, by leeches or by cupping, is of great use in cases of painful acute pleurisy, pericarditis, and peritonitis, in some acute inflammatory cases of Bright's disease, and in some inflammations of the eye and of the brain. The relief from pain and distress, especially in the early stages of acute inflammation of the serous membranes, is so manifest that it can scarcely be disputed, even by the most sceptical. The relief thus afforded has received different explanations. Some practitioners maintain that leeching and cupping are only forms of counterirritation, and the abstraction of blood is unnecessary and useless, if not actually injurious. Others affirm that local bleeding is useful only where there is a *capillary connection* between the skin and the tissues which are inflamed. But this explanation is obviously not applicable to some of the cases in which local bleeding is most indisputably useful; for instance, to inflammation of the eyeball, of the pericardium, and of the kidney. What, then, is the *modus operandi* of local bleeding in these cases? It appears to me to admit of a most satisfactory explanation through the *arterial connection* between the skin and the parts beneath. Take, for instance, the case of pericarditis. The internal mammary artery supplies the pericardium and the integuments over the heart. By the application of leeches over the heart, we abstract blood from the integumentary branches of the internal mammary artery, and in the same proportion we divert blood from the deeper pericardial branches. So, when leeches are applied near an inflamed eye, blood is drawn from the superficial branches of the ophthalmic artery, and diverted from the deeper ocular branches.

Let me illustrate this principle by some very simple and obvious analogies. When my opposite neighbor, Mr. Poole, exhibits his well known illumination, he so depletes the main gas artery of the street, that the chandelier in my dining-room burns with a faint and feeble light. Mr. Poole obviously takes no gas directly from my pipes—there is no immediate "capillary communication" between my pipes and his—yet, by his rapid consumption, he diverts the gas from my burners. My chandelier, therefore, is the analogue of the inflamed pericardium, when leeches are drawing blood through the skin. This is literally a case of inflammation being mitigated by local depletion.

I was giving this illustration to an intelligent non-medical friend, and he said: "I can give you another instance. I have a long pipe from a cistern for watering my garden; at the end of the pipe there is a tap for watering the ferns; nearer the cistern there is another tap for supplying the general surface of the garden. Sometimes, when I am watering the ferns, I find a sudden diminution of the stream, and I know that my sister has turned on the upper tap for watering the garden." Here, again, the ferns are in the position of the inflamed pericardium.

I am indebted to another friend for the following illustration: A spring on a neighboring height supplies a house with water, and on its way there a branch pipe goes off to a fountain in the garden. When water is being drawn off through a large tap in the kitchen, the fountain-jet is much reduced in height. Here, again, the fountain represents the inflamed pericardium.

The same explanation applies to all the cases in which experience has shown that local bleeding is beneficial. It has been denied that cupping or leeching the loins can help an inflamed kidney more "than if the blood had been taken from the arm or from the nape of the neck." But this surely is a mistake. The lumbar arteries, which supply the integuments of the loins, arise from the abdominal aorta close by the renal arteries; and, when leeches or cupping-glasses draw blood through the skin of the back, it is certain that the diminished pressure within the lumbar arteries will divert a certain quantity of blood from the neighboring renal arteries. The principle holds here precisely as in the case of the mammary artery and the pericardium. The blood will as surely take the course indicated by diminished pressure within the vessels, as the water in a pump will follow the rising piston, and the diminution of pressure in a main artery will be greatest near the point where the blood is being rapidly withdrawn through one of the branches. It may be thought that the quantity of blood thus

diverted is very small; and so, in the case of venesection in the arm or neck, how slender is the stream of blood which escapes from the opening in the vein compared with the torrents which are rushing through the great venæ cavæ into the right side of the heart; and yet how decidedly and promptly does this diverted current lessen the distension of the whole venous system. The effect is to remove the proverbial last straw which is threatening to break the camel's back.

If the explanation which I have given of the influence of venesection and of local bleeding be the true one, then it will be seen that, although venesection would, by lessening the amount of blood in the body, and by enfeebling the heart's action, tend to diminish the flow of blood to an inflamed pleura, or pericardium, or kidney, yet any relief thus obtained would be purchased by a much greater expenditure of blood than when the blood is drawn from vessels near the seat of inflammation.

Hot fomentations and poultices, and coverings of *cotton-wool and oil silk*, have a soothing and beneficial influence in many cases of inflamed serous membranes, pericarditis, pleurisy, peritonitis. What is the operation of these remedies? Their action is very similar to that of local bleeding. The warmth relaxes the subcutaneous arteries. The skin, therefore, receives a larger supply of blood; and in the same degree blood is diverted from the vessels of the inflamed serous membrane. Then, too, there is a sort of depletion from the full cutaneous capillaries by the free local sweating which the warmth occasions.

The most marvellous illustration of the relaxing effect of warmth upon the arteries is afforded by the results of a hot injection into the veins of a patient in cholera collapse. The hot liquid (usually at 110° Fahr.) passing into the pulmonary artery, is directly applied to the inner surface of the contracted vessels, whose spasm being thus relaxed, the blood passes freely on, and the state of collapse is for the time removed. The injection is a form of hot fomentation, but with this important difference, that the fomentation is applied directly to the inner surface of each small artery, and not through the integuments to their outer surface.

The faintness which is not unfrequently induced by a hot bath is a result of the relaxing effect of the warmth upon the subcutaneous vessels. There is, consequently, a copious afflux of blood to the skin, and a correspondingly diminished supply to the deeper parts, including the brain. Now, it is remarkable that the pulse of a patient in cholera collapse is often rendered fuller and stronger by a hot bath. The venous blood returning to the heart has its temperature raised; and, in proportion to this elevation of temperature, it will tend to relax the arterial contraction of the lungs, and thus give freedom to the whole circulation. The action of the warmed blood will be similar to that of the hot injection into the veins, but less powerful in proportion as the temperature is less elevated. When bleeding was a common practice in India, it was not unfrequently found that while, during extreme collapse, the circulation was so much obstructed that no blood flowed from a cut vein, immersion in a hot bath so helped on the circulation, that the blood soon flowed from the vein with comparative freedom, and with speedy relief to the patient. It is very noteworthy that the simultaneous application of two methods of treatment, the hot bath and venesection, both of which singly, and still more when combined, tend in ordinary circumstances to cause faintness, should give increased volume and force to the arterial pulse of a patient in cholera collapse. A convincing proof is thereby afforded of the essential difference between the collapse of cholera and the collapse of ordinary exhaustion, whether the result of cardiac weakness or loss of blood-constituents. The influence of the warm blood in promoting the circulation is the exact counterpart of an observation of Harvey's, to the effect that, when the fillet is removed from the arm after venesection, the blood, which has stagnated in the veins and become chilled, as it returns to the heart carries with it a sensation of cold; and "fainting frequently supervenes even in robust subjects." (On the Motion of the Heart and Blood, Sydenham Society Translation, p. 58.) Harvey also noticed similar results from putting a bandage on the arm, so as to make the veins swell; immersing the arm in very cold water or snow; then suddenly removing the bandage, and allowing the chilled blood to flow back to the heart. (*Ibid.*, p. 138.) We now know that the temporary check to the circulation after such an experiment is due to contraction of the minute pulmonary arteries excited by the chilled blood.

And now to return to the action and uses of hot fomentations. We find that, in some cases of severe throbbing headache, no remedy affords so much relief as the continuous application of a sponge wrung out of hot water to the forehead and temple while the head is kept somewhat raised. The warmth relaxes the superficial arteries: there is, consequently, a partial diversion of blood from the internal carotids through the external carotids to their branches beneath the skin. In some cases headache is relieved by immersing the hands or the feet in warm water. The arteries are relaxed, and blood is thus diverted from the head. On the other hand, the effect of putting the feet and legs in cold water is to cause "a determination of blood to the head;" and we find that the headache of anæmia and exhaustion is best relieved by keeping the head low while cold is applied to the forehead and temples. Thus, the superficial vessels being contracted by the cold, more blood is diverted through the intracranial arteries to the anæmic brain.

Dry cupping acts in a somewhat similar way to hot fomentations. It draws an abundance of blood through the arteries into the subcutaneous capillaries, which when the cups are removed, returns through the veins to the heart. In order that dry cupping may be most effectual, each cup should be removed as soon as the vessels beneath are well filled, and then it should be reapplied. The object is first to draw the blood through the arteries into the capillaries; then to allow it quickly to return by the veins; and not to keep it stagnating in the capillaries, which will happen if the glass be retained long on one spot. Another point is not to draw the blood into the skin with sufficient force to cause extravasation, the effect of which will be to impede the circulation through the skin, and so to divert more blood into the inflamed tissues beneath. The sole object of dry cupping, be it remembered, is not to irritate the skin, but to draw blood rapidly from the arteries and as rapidly to transmit it through the capillaries to the veins, in its backward course to the heart.

Cold applications are employed not merely to subdue inflammation of the skin, where they act by contracting the vessels, and so lessening the afflux of blood to the inflamed tissues; but I am told that it is now a common practice in Germany to apply ice to the chest in cases of pericarditis. What is to be said of this practice? In my judgment the practice is attended with much risk. The continuous application of cold to the surface of course causes contraction of the subcutaneous arteries. The secondary result of this may be diverse in different cases. Through the nervous system there may be a sympathetic contraction of distant arteries. The arteries of the left hand may be thus excited to contract while the right hand is immersed in iced water. Thus pulmonary hemorrhage may sometimes be arrested through the sympathetic contraction of the minute arteries of the lung, excited by the application of cold to the surface of the chest; and a vulgar remedy for epis-

taxis is a cold iron key applied to the skin of the back. On the other hand, the contraction of the superficial vessels under the influence of cold, may drive more blood into deeper and distant parts. Thus, when the inmate of a Turkish bath is rendered faint in consequence of the large afflux of blood to the overheated skin, and a correspondingly deficient supply to the brain, a cold douche contracts the cutaneous vessels; then instantly the brain gets a larger supply of blood, and the feeling of faintness is removed. A temporary removal to the cooling-room has the same restorative influence; the cutaneous vessels contract, and more blood is diverted to the brain. So the six lights of a gas chandelier may have been burning steadily, without noise or smoke; but if now three burners are suddenly turned off, the other three, receiving an increased pressure of gas, will often begin to whistle and smoke. The same hydraulic and pneumatic principles are applicable to all these phenomena; and a consideration of these facts suggests that the application of cold to the surface, in cases of inflammation of the deeper tissues, is a remedy of doubtful and possibly of dangerous tendency.

Counter-irritants.—In my judgment, a very common mistake is that of applying strong counter-irritants, so as to inflame the skin, in the early stage of acute inflammation of the viscera or their investing membranes. The result is, that another inflammation, with its attendant pain and febrile excitement, is added to the primary disease. The discomfort resulting from this may be so great that the patient will think less of his original malady, which may, nevertheless, have been aggravated by the cutaneous inflammation. It should be borne in mind that the circulation through the vessels of an inflamed part is more or less impeded, more or less stagnant. If, then, in a case of acute pleurisy or pericarditis, we excite inflammation in the skin over the chest, the result is the opposite to that which is brought about by local bleeding, by dry cupping, and by hot fomentations; for, whereas by these means we divert blood from the deeper tissues to the surface, the effect of an inflamed patch of skin is, through the arterial connections, to throw back the blood upon the parts beneath. In applying irritants to the skin in the early stage of acute internal inflammation, care should be taken not to allow the effect to pass beyond the stage of active engorgement of the vessels; it should stop short of capillary stasis and inflammation. I have already said that local bleeding has been supposed to operate only as a form of counter-irritation. It would be nearer the truth to affirm that the so-called counter-irritants act after the manner of local bleeding, by diverting blood from the inflamed parts beneath. Vesication by means of cantharides may sometimes be useful, by the depletory serous effusion from the vessels.

Let me now gather up into a few sentences the general principles which I have endeavored to establish.

The object of blood-letting is to lessen hyperæmia of certain parts of the vascular system.

Venesection is adapted for lessening engorgement of the venous system, which is usually a result of an impeded circulation through the lungs and left heart. When there are manifest signs of engorgement of the veins and obstruction in the lungs, a feeble arterial pulse does not contraindicate venesection; and there is no inconsistency in combining the practice of venesection with the administration of stimulants.

Local bleeding, by leeches or by cupping, is useful in many cases of inflammation. The bleeding acts by diverting blood through the superficial arteries from the deeper arteries which supply the inflamed parts.

Warm baths, fomentations, poultices, and dry cupping, act in an analogous way to local bleeding, but without actually removing the blood from the system.

Cold contracts the vessels to which it is immediately applied. The result of this may be a sympathetic contraction of distant and deeper vessels, or a driving in of blood to deeper parts. Cold to the surface, therefore, is an uncertain remedy in cases of internal inflammation.

The application of strong irritants, so as to inflame the skin, in the early stage of acute internal inflammation, is a distressing and often a mischievous practice.

As a general rule, in cases of inflammation, those local remedies are the most efficacious which are the most painless, and which quicken in the greatest degree the cutaneous circulation.—*British Medical Journal.*

NATURE AND TREATMENT OF PULMONARY CONSUMPTION AS EXEMPLIFIED IN PRIVATE PRACTICE.

This is the title of a paper continued through several recent Nos. of the *Lancet*, by Dr. C. J. B. Williams, who is high authority on this subject, and his son. In his concluding article (Aug. 15, 1868,) Dr. W. says that, on taking a retrospect of an experience of forty years in the treatment of consumption, he can trace a remarkable improvement in its success as judged by its results. He ascribes this improvement to the use of cod-liver oil, and expresses his conviction that this agent has done more for the consumptive than all other means put together. "And so far," he says, "is this remedy from having 'had its day and gone out of fashion,' that in my experience its usefulness and efficacy have gone on increasing in proportion to the greater facilities for obtaining it in a pure state, and to the improvements in the manner of administering it, in combination with various tonics, and in connection with certain rules of diet and regimen."

Dr. W. states that the average duration of life in phthisis during his forty years' experience has at least quadrupled, or raised from two to eight years, and that "this is below the actual results as calculated by my son; for of the 500 cases, 380 were still living at the last report, and many of these are likely to live for many years to come."

The treatment which Dr. W. has commonly adopted, is as follows:—

"As we have been led to conclude that consumption is essentially a disease of degeneration and decay, so it may be inferred that the treatment for the most part should be of a sustaining and invigorating character. Not only the most nutritious food, aided by a judicious use of stimulants and of medicinal tonics, but pure air, with such varied and moderate exercise in it as the strength will bear, and the enlivening influence of bright sunshine and agreeable scenery and cheerful society, are among the means best suited to restore the defective functions and structures of frames prone to decay."

It is generally considered that consumption should be treated on a tonic and sustaining plan; and that the nourishment and strength of the system should be supported by varied tonics and cod-liver oil, as well as by the most nutritive articles of diet. But, Dr. W. says, "when the disease is ushered in with symptoms of acute bronchitis or pneumonia, with its attendant fever and scanty disordered secretions, it is obvious that such treatment is wholly unsuited for the occasion; and that remedies of the mild antiphlogistic kind, such as salines, with or without antimony, blisters, and cataplasms, and sometimes even moderate leeching or cupping, will give most relief, and will prepare the patient for the safe adminis-

tration of the sustaining class of remedies." * * In case of active inflammation, continued heat of skin, hard racking cough (dry, or with viscid and tinged expectoration), much pain or soreness of the chest or side, it answers well to withhold or withdraw the stronger stimulants and tonics, and for a time--it may be a few days only--to substitute cooling and soothing remedies, with moist epithems or counter-irritants on the chest, and, more rarely, local depletion. But this discipline, which is exceptional, should as soon as possible be replaced by what may be called the regular treatment by cod-liver oil and tonics, and a more generous diet. The transition need not be abrupt. So far as regards cod-liver oil, and the mild acid tonics, with which I generally combine it, the change may be made long before the inflammatory complication has subsided. A dose of these may be given after the morning and perhaps after the mid-day meal, whilst still the saline is taken in the evening and night, and whilst blisters or other counter-irritants are in full operation.

"So soon as the nocturnal heat of skin subsides, and the cough becomes less urgent, and the urine more free, the salines may be replaced by a mere cough linctus, if that be needed; the counter-irritation moderated, and the tonic, given with the oil, gradually strengthened by the addition of small doses of salicine, quinia, or iron. These two last tonics are of great use where they are are well borne, as their influence in strengthening the muscular system and in improving the condition of the blood is greater than that of any other drug; but their use requires much discretion and watchfulness, for they often increase the lingering or intercurrent inflammations, with their attendant pain, constriction, cough, and viscid expectoration, and not unfrequently they derange the functions of the stomach and bowels. It, therefore, often happens, where the patient cannot be seen frequently, that it is safer to be content with a milder tonic—such as calumba, cascarilla, or chiretta—which may be continued for weeks and months together in conjunction with the oil, than to give those that are more powerful, but which by occasional disturbances may prevent the continuance of the remedy.

"But the great remedy, more essential and more effectual than any other, is the cod-liver oil, and we may well bestow a little consideration on the mode of using it to the best advantage. It is now pretty generally admitted by the profession that the pure, pale oil, simply extracted from the fresh, healthy livers of the fish, is that most suitable for the majority of patients, as being less unpalatable and at least as efficacious as the impure kind." * * * *

"Cod-liver oil, when taken into the system in sufficient quantities, and for a sufficient length of time, acts as a nutrient, not only adding to the fat of the body, but also promoting the healthy growth of other tissues, and in some way, as an alterative, counteracting the morbid tendency to the proliferation of the decaying cells of pus, tubercle, and kindred cacoplastic and aplastic matters.

"That its efficacy depends much upon its being absorbed freely into the blood, and through the circulation pervading all parts of the body, and thus reaching to the very seat of the morbid deposits and formations. That the more fluid part of cod-liver oil surpasses all other oils and fats in the facility with which it forms emulsions, which are tolerated by the stomach and readily absorbed into the blood, without causing the nausea and bilious derangement that commonly result from an excess of fat food. This peculiarity may depend on the biliary and other matters contained in the oil, which in other instances of disease is found to act beneficially on the liver and other secreting organs.

"That the best time for the administration of the oil is immediately after, or, to those who prefer it, at or before a solid meal, with the constituents of which the oil becomes so intimately blended that it forms a part of the chymous mass, and is less likely to rise by eructation than when the oil is taken into an empty stomach. From this chymous mass, the oil being absorbed through the lacteals with the chyle, is less apt to disorder the liver than if absorbed through the veins of an empty stomach.

"That as the use of the oil should be continued for a long time—perhaps for months, or even years—it is of great importance to conciliate both the palate and the stomach by giving it in a vehicle which may agreeably disguise its flavor and strengthen the stomach to bear it. For this purpose an aromatic bitter, such as the compound infusion of orange peel, acidulated with a mineral acid, both to help to cover the taste of the oil and also to suit the stomach, which should be duly supplied with acid during digestion, generally answers well. Syrup may be added according to the taste of the patient; or, still better, some bitter tincture, such as calumba, cascarilla, or quinia, in every case in which it is desirable to improve appetite and tone. In cases of peculiar weakness of stomach, with tendency to retching or nausea, strychnia, in a dose of from 1-32 to 1-24 of a grain, proves a most valuable adjunct to the vehicle. By its means I frequently overcome the fastidiousness of stomach arising from debility, hysteria, or indulgence in alcoholic liquors. Salicine is another efficacious alternative of the same kind. Either of these, although a powerful tonic, has none of the heating properties of quinia or iron. When the strong bitter taste is objected to, a pill, containing extract of hop or chamomile, or salicine, or quinia, may be taken after, or before, the oil and its vehicle.

"The bulk of the whole dose of oil and vehicle, should be small, so that it may be swallowed at a single draught; therefore the vehicle should not exceed a tablespoonful, with, at first, a teaspoonful of oil, to be gradually increased to a tablespoonful. The dose of oil should rarely exceed a tablespoonful twice or thrice daily: when a larger amount is taken at a time, generally either it deranges the stomach or liver, or some of it passes unabsorbed by the bowels.

"The acid may be varied according to circumstances. The nitric generally suits best in inflammatory cases, and those attended with much lithic deposit in the urine; but its tendency to injure the teeth is an objection to its long continuance. The sulphuric is more eligible where there is liability to hæmoptysis, profuse sweats, or diarrhœa. But in most cases, and for long continuance, I have found reason to prefer the diluted phosphoric acid, which may be termed the most physiological of the acids, tending to derange the chemistry of the body less than the others.

"With some individuals the oil agrees so well, and so much improves their digestive powers, that they require few or no restrictions in diet; but this is not the case with the majority. The richness of the oil does prove more or less a trial, sooner or later, to most persons: and to diminish this trial as much as possible, it obviously becomes proper to omit or reduce all other rich and greasy articles of food. All pastry, fat meat, rich stuffing, and the like, should be avoided; and great moderation observed in the use of butter, cream, and very sweet things. Even new milk in any quantity is not generally borne well during a course of oil; and many find malt liquor too heavy, increasing the tendency to bilious attacks. A plain nutritious diet of bread, fresh meat, poultry, game, with a fair proportion of vegetables, and a little fruit, and only a moderate quantity of liquid at the earlier meals, commonly agrees best, and facilitates the continued exhibition of the oil

in doses sufficient to produce its salutary influence on the system.

"In case of a bilious attack coming on, indicated by nausea, headache, furred tongue, offensive eructations, high-colored urine, and sometimes pain and tenderness of the right hypochondrium, it is necessary to suspend the oil, lighten the diet of the patient, and give blue pill or calomel with an aperient on alternate nights, and an effervescing saline two or three times during the day. A few days of this treatment will generally set the stomach and liver to rights, and the oil may be resumed, beginning with small doses as at first. In all cases during the use of the oil the bowels should be kept regular in action; and if this cannot be done by regularity of habit and diet, it should be effected by the use of a mild daily pill of rhubarb or aloes." * * * *

"Although my long experience assigns to cod-liver oil a place far above all other remedies in the treatment of pulmonary consumption and its allied maladies, it has taught me to believe also in the limited efficacy of certain other agents, and it would not be fair to pass these over in this brief summary of treatment.

"A combination of iodide of potassium and nitric acid with a vegetable tonic, Dr. W. says, has distinctly wrought some good in consumptive cases before the pure oil was introduced. He still sometimes uses this medicine in the rare cases in which cod-liver oil disagrees or cannot be taken, and thinks that it is improved by the addition of a drachm or two of pure glycerine to each dose. Glycerine by itself is of little use, but it is valuable as a lubricant, and to sheathe the acrimony of mineral acids and other pungent medicines.

"The hypophosphites of soda and lime, so strongly recommended by Dr. Churchill, of Paris, have in my hands proved decidedly beneficial in certain cases. They have been tried by Drs. Quinn and Cotton, at the Brompton Hospital, with only negative results; but having met with several patients who distinctly ascribed their improvement to Dr. Churchill's treatment, I have thought it right to try them myself, both as a substitute for the oil and in addition to it. In the former way the results have not been generally satisfactory: the hypophosphite does not disagree, but there is no marked improvement as under the oil; and when they have been doing well under the oil, the patients generally lose flesh and strength when the hypophosphite is substituted for it. On the other hand, it has happened to me in several cases that a patient has long been taking the oil, and, after having derived great benefit from it, halts in his improvement, or even loses ground, and then the addition of the hypophosphite has been followed by a marked change for the better; flesh and strength have been gained, and the chest symptoms have been more or less improved. In these cases I have merely added four or five grains of the hypophosphite to the vehicle in which the oil is given, always selecting the phosphoric as the acid, and generally substituting glycerine for the usual syrup. Such precautions are necessary, because the hypophosphites are very unstable in composition; the addition of nitric acid, or mere exposure of the solution to the air (if not guarded with glycerine or a good deal of syrup), being sufficient to convert them into inert phosphates. In my mixture of the hypophosphites with phosphoric acid, I presume the hypophosphorous acid is set free, and is the active agent in the compound. How it acts is quite uncertain. * * *

"Perhaps the efficacy of the sulphurous acid—Dr. Dewar's remedy for consumption—may depend on an influence not altogether unlike that of the hypophosphites. My experience of the use of the spray of sulphurous acid is limited in phthisis, and as far as it has gone has not been very encouraging. But I have found the spray a most useful and agreeable remedy in various affections of the throat, whether diphtheritic or aphthous; and it has proved cleansing and soothing in some cases of foul ulceration of the throat, affecting both larnyx and fauces, generally syphilitic in origin and sometimes ending in pulmonary consumption.

"In connection with this subject, I must notice remedies administered by inhalation, which are really useful in certain cases, chiefly those in which the larnyx and trachea are much affected, and in those attended with convulsive cough or offensive expectoration. I have generally found the use of inhaling instruments fatiguing and unnecessary. A quart jug of hot water, with a napkin from over the nose down to and around the jug to confine the steam, is all that is needed. To the hot water is added the drug to be inhaled; and creosote or carbolic acid, iodine, chloroform, oil of turpentine, and juice or extract of hemlock, are the articles which I have found most beneficial. A few drops of one, or of several of these combined, being put into the hot water, the inhalation is practiced through both mouth and nostrils without restraint or difficulty, and may be continued for five or ten minutes every night, and, if need be, repeated once or twice in the day. Although the chief operation of this medicated vapor is on the guttural and bronchial surface, yet a portion penetrates into the lungs, and is absorbed into the system; for iodine and oil of turpentine can be detected in the urine within a few minutes of the inhalation being made. Still, although proving very serviceable in certain cases, I cannot rank inhalation higher than as a subordinate remedy in the treatment of consumption. I may add, that the practice of painting the chest with tincture of iodine every night, as a gentle counter-irritant, is not without a certain influence in the way of inhalation; for a portion of the iodine evaporates, and slightly impregnates the air around the patient, and this atmosphere of iodine may not be without its influence for good." * * * * *

"Of far more importance in the treatment of consumption is change of air and climate. It is of the greatest consequence to the phthisical invalid that he should breathe as pure an air as possible, and that the influence of this pure air on the blood and body should be increased by such gentle and varied exercise in it as his strength and the condition of his organs will permit. This is the great object of our sending him to a warm climate in winter, and to a high and dry locality in the summer, that he may be as much as possible in the *open air*, with its exhilarating and vivifying accessories of light, purity, and freshness, without the chilling operation of cold and wet in the winter, and the enervating and exhausting influence of oppressive heat in the summer." * * *

In conclusion Dr. W. states "that, powerless as medicine is in the overwhelming and rapid types of pulmonary consumption, it has yet considerable influence over the milder forms; and *that under careful treatment life may be prolonged for many years in comfort and usefulness, and in not very few cases the disease is so permanently arrested that it may be called* CURED."

ON THE USE OF CROTON OIL AS A COUNTER-IRRITANT IN HEAD AFFECTIONS.

By Robert S. Turner, M. A., M. B. (Communicated to the Royal Medical Society, Edinburgh, 27th March, 1868.)

While assistant to the extra physicians, and resident medical officer at the Sick Children's Hospital last year, I had opportunities of observing an unusually large number of cases of tubercular meningitis, and, in many of them, of dissecting

the bodies after death. Every method of treatment generally employed was tried, including counter-irritation by mustard and cantharides, iodide of potassium, mercury, and antimony, internally; but, until the cases I am about to relate occurred, the best result obtained was a remission of the symptoms for a few hours, and even this was rare. I was thus, like every one who has seen much of the disease, put in the painful position of being able in most cases to give a prognosis only too correct, and to know what pathological appearances might be expected, without having it in my power to be of use. Any method of treatment, therefore, of the slightest promise, was hailed with delight and tried with the greatest eagerness.

I am the more desirous of communicating a few cases in which treatment was attended with beneficial results, since the latest writer on the subject, Dr. Gee, in the second volume of "Reynold's System of Medicine," has expressed a very decided opinion as to the fatality of the disease. "Tubercular meningitis," he says, "has been known to end in recovery. It is necessary to know this as a matter of science, but in practice it unhappily comes to this, that a person suffering from tubercular meningitis will inevitably die."

Case I.—Elizabeth Wilson, aged six years, was admitted into the Children's Hospital on the 21st of August, 1867. She was in hospital about five weeks before, suffering from measles, and although convalescent when dismissed had never regained her usual strength. About ten days before readmission, her mother said she had had a fit and afterward attacks of "the nerves." She had complained for some time of pain in the head and bowels. The bowels were confined. Several children of the same family had died of phthisis in the hospital.

On admission the child was dull and sleepy, kept constantly grinding her teeth, and frequently started in her sleep. The pulse was slow and irregular. From the history and symptoms, the case was readily diagnosed as one of tubercular meningitis. The bowels were moved by an enema, and the stool was carefully examined for worms, but none were found; the hair was cut short, and cold applied to the head; she was ordered also to have two grains of iodide of potassium thrice a day. The symptoms increased in severity, and three days after admission, she had a convulsion and became comatose, with stertorous breathing and strabismus. Dr. Weir, the physician on duty at the time (to whom I am indebted for liberty to report this and the two following cases), now ordered the head to be shaved and croton oil (one part of croton to three of olive oil) to be rubbed into the scalp. As soon as the croton eruption appeared the coma gradually passed off, and the child began to regain consciousness. She rapidly improved, and about a fortnight after admission was able to be up and run about. On the 15th of September, however, she was suddenly seized with a violent convulsion, and the head symptoms returned. Next day she had another severe convulsion, and died. A post-mortem examination was not allowed.

Case II.—Helen Allen, aged five years, was admitted 21st August, 1867. Patient had been complaining of dizziness and headache, and had been losing flesh and appetite for about a month before admission. A sister died of tubercular meningitis in the hospital about a year before.

On admission her symptoms were much the same as those of Elizabeth Wilson, just described, and, in addition, she had vomiting and great intolerance of light. There were no worms in the motions, which were at first confined but afterwards loose. She was ordered cold to the head, and iodide of potassium. The symptoms increased, but not so rapidly as in the preceding case. About a week after admission she was decidedly worse. She lay on her back with her eyes turned up, and could not be roused without great difficulty. Her head having been shaved, the croton liniment was now applied, but, before the eruption had time to come out, her breathing had become stertorous, she had slight convulsions, and her urine and fæces were passed unconsciously. As soon as the eruption appeared, however, the symptoms began to abate, and in a few days they had altogether passed off. In addition to the iodide of potassium she was ordered cod-liver oil. For about three weeks she continued well, but as the irritation of the eruption was passing off, she began to complain of headache and giddiness. The liniment was again applied, with the effect of relieving the symptoms, and the eruption was kept up for some weeks, during which time the patient appeared perfectly well. By the middle of October the irritation was again allowed to subside, and although the patient complained of a little headache, the croton oil was not applied till the 20th October. On that day she fell down in a fit, and her head was severely cut by coming in contact with the corner of a stool. Before the eruption appeared she had another less severe convulsion, but on its coming out fully she again got better, and continued so till she was dismissed on the 26th of November.

Case III.—Andrew Armstrong, aged two years and nine months, admitted 2d September, 1867. The history was the usual one of tubercular meningitis—irritability, loss of flesh, starting and grinding the teeth during sleep.

On admission he was in a semi-comatose state, and the pulse and respiration were irregular. His head was at once shaved, and the croton liniment rubbed into the scalp, and he was ordered two grains of iodide of potassium thrice a day. Next day the coma had become deeper, and squinting had come on; so ill was he, in fact, that it was considered hopeless to apply the croton oil again with the view of hastening eruption. On the following day, however, the eruption began to appear, and, as in the other cases, the patient was well in a few days. The irritation was kept up for some time by a weaker liniment. He recovered without a bad symptom, and was dismissed on the 5th of October quite well.

Case IV was that of a child about three years old, whom I saw in the out-door department of the hospital. I have no notes of the case, and therefore I am not able to detail the symptoms; but they were of such a nature that, taking the history also into account, Dr. Caton, then assistant to the extra physicians, and myself had no hesitation in ascribing them to tubercular meningitis. Directions were given to have the head shaved, and a croton oil liniment rubbed into the scalp, and iodide of potassium was ordered internally. The child soon got so much better that attendance at the hospital was stopped, and he continued well till the eruption on the head disappeared. About a fortnight after his last visit to the hospital he became much worse, and his mother wrote requesting that he might be attended at his own home. By some accident the letter was not delivered till three days after, and, when I got to the house where he lived, I found another medical man in attendance, who said he was treating the child for acute hydrocephalus.

Case V was seen more recently, and is at present in the infirmary under the care of Dr. Grainger Stewart, who has kindly allowed me to refer to it.

William Macintosh, aged thirty-six, an engraver, was admitted in Ward 6, 22d January, 1868. Two years before admission, he sustained an injury of the head by falling down stairs, from the effects of which he was laid up for some days. Afterwards, although able to work, he occasion-

ally had fits of headache, with shivering and loss of appetite. In the end of August last he was exposed to cold and wet, and for six weeks after had severe headache, with occasional loss of consciousness and convulsions, which occurred two or three times a day, and lasted for about five minutes each time. By the end of November he had got better, but on the 24th of December he had a violent convulsion, and from that time became gradually worse.

On admission he was in a dull, drowsy condition, and could be roused only when spoken to sharply and loudly. When answering questions, he spoke very slowly and indistinctly. He complained of pain in the head. The pulse was slow and irregular. The bowels not having been moved for some days, he was ordered a large dose of castor oil. Next day he was much in the same state, or rather worse. The castor oil had not acted, and an enema was ordered. The head was shaved, and croton oil rubbed into the scalp. On the 25th he was much worse, the urine and fæces being passed in bed. The eruption had not appeared on the scalp, and the liniment was again rubbed in. By the evening of the 26th the pulse had become quick, and the breathing stertorous, and he was to all appearance moribund. The scalp, however, was becoming inflamed. Next morning, while his friends were watching to see him die, he suddenly looked up and told them to take away the "dead screen," which had been placed round his bed. By visit-hour he had got much better, being able to answer when spoken to, and from that time he rapidly recovered. Since then he has had occasional attacks of headache and giddiness, accompanied with indistinctness of speech, but these have always been relieved by the croton eruption.

In all these cases there was undoubtedly some serious affection of the brain or its membranes, and in all of them the disappearance of most grave symptoms occurred simultaneously with the appearance of the croton eruption; not only so, but as the eruption began to fade, the symptoms returned, presenting the "waxing and waning" phenomena of logicians. The relation of the two was so marked that I cannot believe it was other than that of cause and effect. The disappearance of the symptoms cannot be accounted for by supposing it due to the iodide of potassium alone, for this drug has often been used in the same circumstances without effect; and in the last case it was not given till the patient had been roused from coma, and was beginning to get better. I do not deny that it may have had some influence in the ultimate recovery of the patients; but had they not been roused, and the inflammation within the cranium subdued, as I believe it was by the croton eruption, the action of the iodine would not have been established before the death of the patients. As far as I could observe, there was no other circumstance which in any way influenced the course of the cases.

On looking into the literature of this subject, I find that croton oil has been used before in the same way, and with equally good effect. Dr. Watson of Southampton, in the *British Medical Journal* for 1859, records a case where acute hydrocephalus occurred after the suppression of an eruption on the scalp, which he treated by this means, and which ultimately recovered. In the *New Sydenham Society's Year-Book* for 1859, reference is made also to a paper on Tubercular Meningitis, by a Swedish physician, Dr. Bang, in which he recommends counter-irritation by croton oil or tartar emetic, having seen, he says, good results from both.

Let it not be supposed that I consider croton oil inunction an infallible remedy for meningitis; but the evidence in its favor is, I think, sufficient to justify me in bringing the subject before the Society, in order that, should others see fit, they may test its value for themselves in this and allied diseases.—*Ed. Med. Journal.*

MIDWIFERY.

ILLUSTRATIONS OF THE VALUE OF THE MICROSCOPE IN THE TREATMENT OF THE STERILE CONDITION.

Read in the Midwifery Section at the Annual Meeting of the British Medical Association in Oxford, August, 1868.

By J. Marion Sims, M.D., Paris.

The great Velpeau died, having no faith in the practical utility of the microscope; and I am ashamed to say that, even ten years ago, I was one of those who believed it to be merely a scientific toy with which to while away leisure hours. Fortunately, my ignorance was dispelled, and I now look upon the microscope as essential to the daily duties of the physician. While I would refer you to Beale and others for what it has done and is doing in the broad domain of medicine, I shall content myself with laying before you now a few illustrations of the value of the microscope in the treatment of the sterile condition.

In the investigation of a case of sterility, there are three questions that must be settled at the outset, if we expect to proceed understandingly.

1. We must be sure that we have semen with spermatozoa.
2. We must ascertain if the sperm enter the utero-cervical canal.
3. We must determine whether the secretions of this canal are favorable or not to the vitality of the spermatozoa.

The present advanced stage of physiological knowledge warrants us in saying that conception is impossible without spermatozoa; that it is impossible if the spermatozoa cannot pass into the cavity of the uterus; and that it is equally impossible if they die, or are poisoned, on their passage to this cavity. These three points we must determine, it matters not what other complications there may be. Fortunately, they are all easily and quickly settled by the microscope. Without the microscope, it is utterly impossible to determine either one of them. Without the microscope, then, our treatment of the sterile state is simply blind empiricism. With it, our diagnosis becomes absolutely certain, and our treatment at least rational. What, then, are the first steps in this investigation? How can we begin? Where shall we begin? We only need a drop of seminal fluid to determine whether it contains spermatozoa or not.

I am in the habit of examining the vaginal and cervical mucus for spermatoza some hours after coition, and I have thus often determined the three propositions above laid down all at once. Gosselin and other French physicians direct the man to use one of those abominable things so common in France (and, I am sorry to say, now also in my own country) which are intended to protect the male against infection, and the female against both infection and conception. This, with its contents, is sent to the microscopist for the necessary investigation. But a nicer way of managing this disagreeable but important affair is that adopted by my friend Mr. Curling. He directs the man, immediately after intercourse, to squeeze a drop of mucus from the urethra on the object-glass; and from this the examination is made. This will settle the question, so far as the man is concerned; but it will still be necessary to examine the utero-cervical secretions to determine the second and third propositions; and therefore I never put the man through the above ordeal till I am forced

do so. Fortunately, it is not often necessary. Given a case of sterility for investigation, the physician examines the state of the uterus and its appendages. His patient may have a frightful dysmenorrhœa, a contracted or flexed cervix, a malposition, or something that would probably prevent the passage of the semen into the cavity of the uterus. He may feel perfectly convinced that his patient can never conceive, unless some surgical operation be performed—perhaps incision of the cervix uteri. This operation is usually done, to permit the easy passage of the semen into the uterine cavity. But how can we tell that the semen does not pass into the uterine cavity? We must not take it for granted that it does not, simply because the os uteri seems to be small; for we know that cases are on record where conception has occurred where the os would barely admit a small sized probe; and we know also that spermatozoa occasionally pass along the Fallopian tubes, which barely admit the passage of a bristle. If the semen enter the cervical canal, we may lay it down as a rule, that an incision of the cervix is not necessary; but, if it do not, it may be necessary. We may perform any operation we please for the relief of suffering, and for the restoration of health; but I insist that we have no right to perform any operation, or to institute any treatment whatever, solely for the cure of the sterile condition, till we have first settled the three propositions above laid down touching the presence and viability of the spermatozoa. To find out all at once, and with the least delay and trouble, I usually say to the husband, (or wife, as it may be) "It is very important, before instituting any treatment, to be sure that the semen enters the canal of the neck of the womb, and also to be sure that the uterine secretions do not neutralize the semen; for, under such circumstances, there could be no conception. Will you, then, have the kindness to send your wife to me, or come with her, when you have had sexual intercourse in the morning?" In nineteen cases out of twenty, the wife presents herself the next day. The speculum is introduced, and some vaginal mucus is removed with the syringe, and placed on an object-glass. Then some cervical mucus is drawn out, and placed on another object-glass. These are then examined under the microscope. If we find spermatozoa, well and good; but, if we find none, our fears are at once aroused. What then is to be done? I simply say that I am not quite satisfied with the examination, and would like to see the wife again under the same circumstances. But suppose we find none on the second examination: then I have been in the habit of saying, "I would like to see your wife in bed twenty or thirty minutes after sexual intercourse, for I fear her vagina holds no semen." The husband appoints the time; and, of course, I am punctual. If I then find in the vagina a fluid with the seminal odor, I am satisfied with the microscopic examination. But it will not do to say we have no spermatozoa, simply because we find the vagina empty; for I have occasionally examined the vagina eight or ten minutes after coition, and found it empty, and with no sign of spermatozoa whatever in the little mucus that would naturally stick to its walls; and that, too, where a normal quantity of semen, full of the fructifying principle, had been ejaculated. But, unfortunately, the vagina had ejected the whole of it, as a consequence of some anatomical configuration. If we fail to get any for examination, we are then forced to Mr. Curling's expedient. Suppose, at last, we are satisfied that the semen contains spermatozoa, then, as before said, we have to determine whether these pass into the cervix uteri; and, if so, do they find a fluid there favorable to their existence alive? And all this can only be done by the use of the microscope.

The question of the entrance of the semen into the cervical canal, and of the effect of its secretion upon the spermatozoa, can be fully and satisfactorily ascertained only during a very brief period. We may make a mistake if the microscopic examination be undertaken just before the expected return of the menses; and why? Because there is always a certain amount of fulness of the uterus—of engorgement, so to speak—which precedes the menstrual flow; and the cervical canal may not admit the semen from mere turgescence of its walls. Besides, at this time, its secretions are almost sure to kill the spermatozoa even if they should happen to enter this canal.

Physiologists are generally agreed that conception takes place during the week following menstruation. Avrard says we have fourteen days of active uterine life and fourteen days of uterine hypnotism. He says that conception can occur at any time after menstruation up to the fourteenth day, counting from its commencement. For instance, if menstruation should last for three days, then we would have eleven days for the possibility of conception. But, if menstruation should last eight or nine or ten days, then we would have respectively but six or five or four days as the time possible for conception. After this time, the uterus, according to Avrard, lapses into the hypnotic state, when conception is impossible. While I am disposed to accept Avrard's dictum as the rule, I think I have seen exceptions to it, if we can always depend upon testimony seemingly reliable. Be this as it may, I am sure of this fact: if we wish to determine the effects of the cervical mucus upon the spermatozoa, we must make the experiment during the week that follows menstruation. About the fifth or sixth day after the flow is the best moment; for then the uterus is in the most favorable condition. The cervical mucus, which just before menstruation was perhaps thick and opaque, then becomes clear and translucent. If, by examination made at this particular period, we should find spermatozoa in the cervical mucus, we could safely say that it will not be necessary to incise the neck of the uterus. But if the sperm do not enter the canal, then the probabilities are in favor of the necessity of some surgical interference. The semen may enter the cervix in great abundance, and we may find the spermatozoa all dead, even but a few minutes after coition. Then, of course, we must find out the source of the poisonous secretion, and remedy it; for a vitiated secretion shows some organic condition requiring a special treatment.

As before said, when I wish to examine the action of fhe cervical mucus upon the spermatozoa, I order sexual intercourse in the morning—the dorsal decubitus to be retained for an hour afterwards; and I expect a visit from my patient four or five or six hours after coition. Sometimes I find spermatozoa in great abundance in the cervical canal, and not one living. [I have occasionally examined the mucus, six, eight, and ten minutes after coition, and found all the spermatozoa dead.] Sometimes we find half of them dead; again, only about a third; again, two-thirds. Sometimes, in one portion of the mucus, every spermatozoon is dead; while, in another portion of the same sample with fewer epithelial scales, we may find them alive and in great numbers. Now and then, after treatment for a month or more, I have found the mucus drawn from the lower segment of the cervical canal full of living spermatozoa, and I have supposed that the case was cured; but when I came to examine that drawn from the upper segment of the canal, near the os internum, they were nearly all dead. This was evidently because the mucous membrane lining the lower segment of the cervix, being more easily reached and more thoroughly treated, had assumed a healthier character, and consequently its secretion was restored to a normal condition; while that higher up, and

more difficult to reach, had not been so much improved, and hence its secretion was still abnormal—a condition requiring further treatment.

The vaginal mucus, by its natural acidity, kills very quickly every spermatozoon. I do not now remember ever to have found one alive in the vagina, except when the examination was made very soon after coition; when, indeed, the vagina was full of semen but slightly mixed with other secretions. Examined three or four hours after intercourse, the spermatozoa found in that portion of the mucus of the vagina adhering to its walls are always all dead. Indeed, the normal vaginal secretion seems to be a perfect poison for the superabundant spermatozoa.

When, after a month's treatment, I wish to know whether the case is cured or not—in other words, whether all possible recognized barriers to conception are removed—I order sexual intercourse (just after menstruation) at night, and examine the cervical mucus twelve or fourteen hours afterwards. If the majority of the spermatozoa be alive and active, I have great hope of conception. Before dismissing a case as cured, I think it necessary to examine the mucus thirty-six hours after coition; and, if it is then all right, I suspend the treatment, and patiently await the hoped-for result.

So much care is necessary in the removal of the mucus for microscopic examination, that I may be pardoned for referring to it again. The patient is placed in the left semiprone position, as I have elsewhere so minutely described, and my speculum is introduced, and some of the vaginal mucus is drawn up with a small glass syringe, previously washed out with warm water. This is deposited on the object-glass; the vagina is then cleared of all secretion, whether vaginal or cervical, the whole of the vagina and the os uteri being thoroughly wiped over with a pledget of cotton. This is for the purpose of guarding against the possibility of mixing vaginal and cervical mucus, which would, of course, spoil the whole experiment. The cervix is brought forward either by the depressor or a tenaculum, if necessary, which enables us to look directly into the cavity of the cervical canal. The syringe is then to be again thoroughly rinsed in warm water; its nozzle is passed into the gaping canal for half an inch, and the cervical mucus in its lower segment is drawn out. The instrument is emptied, washed out again with warm water, and reintroduced up to the os internum, and another portion of mucus is drawn out, provided there is any left after the first effort. Thus we have three specimens of mucus; *i. e.*, the vaginal, and two from the upper and lower portions of the cervix unmixed with the vaginal. The cervical secretion should be clear and translucent, and about the consistence of the white of egg. If it contain any little opaque specks of milky whiteness, it invariably poisons the spermatozoa, to a greater or lesser extent. But the portions of it without the milky-looking specks may be very favorable to spermatozootic life. We sometimes find the cervical mucus perfectly clear, and yet poisonous to the spermatozoa. Here we would naturally expect to find excessive alkalinity of the secretion; but I have not been able to detect it. In these cases, it has seemed to me that the spermatozoa were killed—drowned, as it were—by the very abundance of the secretion. I do not here allude to cases of uterine catarrh, where the secretion is very thick and albumino-purulent; for, of course, this is a deadly poison to the living principle of the semen. But I allude wholly to such cases as have been changed by treatment to a condition giving rise to a secretion seemingly normal, so far as an ordinary ocular examination is concerned. Here the microscope is our unerring guide. The mucus may be clear, and perfectly normal in appearance; but, if it kill the spermatozoa, then there is still some point in the canal of the cervix, or in the cavity of the uterus, that gives out a vitiated secretion; and this must be found out and corrected before the case is wholly cured. When we find living, active spermatozoa high up in the cervical canal thirty-six or forty hours after coition, we can pronounce the case cured, so far as it can be by surgical means, and not till then.

It is time for us to pause and consider if there is not something more to be done for the sterile condition, than to split up the cervix uteri. I look upon this operation as one of the greatest importance, as one of the most valuable in uterine surgery, but I think that we have followed too blindly the example and teachings of its illustrious author, Sir James Y. Simpson. For myself, I am now sure that I have cut open the cervix uteri, perhaps scores of times, when it was both useless and unnecessary; and I know that others have done the same thing. Do not misunderstand me. I speak here solely of the operation with reference to the sterile condition, when it would be wholly useless if the husband happened to be sterile, and certainly unjustifiable unless imperatively called for by considerations of health. Incision of the cervix for dysmenorrhœa, is one thing; incision of the cervix for sterility, even if these be dysmenorrhœa, is another; and it behoves us to draw the line of distinction in every case, and not take it for granted that every woman is sterile who may have dysmenorrhœa or feeble health, or that every man is prolific who may be vigorous and enjoy good health. I am sorry to say that I have had the misfortune to incise the cervix in half a dozen cases of sterility, where I found afterwards, to my great mortification, that the husbands were incapable of procreation, because their semen had no spermatozoa, and that too since I have known the value of the microscope. In each case the operation was called for to restore health, but was totally useless for the relief of its incidental accompaniment, sterility, and would not probably have been submitted to for considerations of health alone, had it not been for the hope of offspring afterwards. I made the mistake of operating on these cases, because the social position, moral character, and appearance of health in the husband, conjoined with the excessive dysmenorrhœa and utter prostration of the wife, led me to operate without the preliminary step of ascertaining whether there were spermatozoa or not. I wish others to profit by my mistakes; and I am less ashamed to tell you of them, than I am to own them to myself. However, this can never happen to me again, and should not, after this warning, happen to any of my brethren. I know many men who have no spermatozoa, and cannot therefore become fathers. They are all strong, active men in the prime of life, and all perform the sexual function with vigor and at will. The very fact of their natural vigor and strong passions had been their ruin, for most of them had contracted urethritis during their early and unmarried life, and had suffered from its unlucky sequence, epididymitis. This condition is said to be sometimes remedied, but I have not as yet seen a case of it cured.

To illustrate the necessity of the microscope in this department of surgery, I shall append a few cases, drawn up as succinctly as possible.

No. 1 had consulted two of the most eminent physicians in England and remained under the care of one of them for many weeks. She said that during the time the neck of the uterus was repeatedly cauterised. She got impatient and went to another physician, who told her that the caustic treatment that she had submitted to was worse than useless; and that a surgical operation was the only thing to be done. She consented to it, and he incised the cervix bilaterally. She did not

conceive, and two years afterwards came to Paris to see me. I found the uterus normal in all its relations, the os tincæ and cervical canal sufficiently patulous. I explained to both husband and wife the importance of examining the cervical mucus four or five hours after coition. They returned the next day; the cervical mucus contained spermatozoa; therefore there was no necessity for any further surgical operation. But the spermatozoa were all dead; therefore there was a necessity for a treatment to rectify the vitiated cervical secretion. She remained in Paris a few weeks under my care, was cured, and became a mother in nine months after her dismissal. Now, if the first physician had used the microscope, as I direct, he would probably have found that the semen never entered the cervix at all; and, if the second one had done the same thing, he would certainly have found that the mucus of the cervix poisoned the spermatozoa.

No. 2, a lady, in the highest ranks of life, was sterile. The cervix uteri was incised bilaterally. She had pelvic cellulitis afterwards. Two years after this I saw her, she was still childless. The microscope showed that the cervical mucus, examined four hours after coition, killed all the spermatozoa. While this condition exists conception is impossible.

No. 3, sterile, was treated for sterility in America for a long time (two or three years). She came to Europe; had the cervix cut open, and was sent away with the promise of offspring. I saw her some time afterwards. The microscope proved that the husband was sterile. Therefore, the previous treatment in America and the operation in Europe were useless. I could relate several other cases like the above. But, as I have often made the same mistake before I fully understood the value of the microscope, I compassionately forbear.

No. 4, married four years; sterile. She had dreadful dysmenorrhœa, followed by discharge of a bloody brownish mucus of an offensive odor. The uterus was anteflexed; anterior wall hypertrophied; os uteri small, I was in doubt, at first, whether to recommend an incision of the cervix or not. The husband was a distinguished physician. I told him that an operation would be necessary if the semen did not enter the canal of the cervix; but if it did enter, the case might be cured without cutting. The doctor and his wife came to see me the next day, some five or six hours after sexual intercourse. A drop of mucus from the cervix contained spermatozoa in great abundance. Here, the whole question of diagnosis and treatment was settled at once, and in the only way possible, by the microscope. For this one examination proved all that was essential to know; viz.: 1. That the semen was perfect. 2. That it entered the cervical canal, and therefore there was no surgical operation necessary. 3. That the cervical mucus poisoned the spermatozoa, and hence a treatment directed to the utero-cervical canal was indicated. After the next menstruation (a month's treatment) the cervical mucus was considerably improved, for it contained large numbers of active spermatozoa. At the end of two months I found living spermatozoa in the cervical mucus, thirty-six hours after coition. All treatment was now suspended, and after the next menstruation conception took place.

No. 5.—Married five or six years without offspring. The uterus was small and retroverted by a fibroid about the size of a walnut on its anterior surface, just at the junction of the cervix and body. The os was very small, so small that one of the most distinguished of our accoucheurs advised incision of the cervix to admit the passage of the semen, although he was not in the habit of performing the operation, and, as a general rule, was opposed to it. In former years, I would have given the same advice without the slightest hesitation. But now I said, no. Let us first see if the cervix admits the semen. If so, the operation is hardly necessary. If not, it is. I saw the wife the next day. A drop of cervical mucus under the microscope determined the question against the operation at once; for the mucus was full of spermatozoa, but they were all dead. During the treatment of this case I have seen the mucus in the lower segment of the cervix full of living spermatozoa, while that taken from the os internum was full of dead and dying ones. Nothing but the microscope could have revealed the truth in such a case as the above.

No. 6, married eight years, sterile, had been treated by several distinguished physicians for the sterile state, and had been to Ems and other watering-places, all for no result. At last she came to Paris to see my friend Sir Joseph Olliffe, and he called me in consultation. I found a long, conical, indurated cervix, with a small os—just such a case as I would have pronounced sterile by necessity, and just such as I have over and over again operated upon without further thought. But now I wished to be sure, before recommending an operation. After explaining the necessity for it, I requested this lady to come and see me four or five hours after coition. She returned the next day. I could find no spermatozoa in either vaginal or cervical mucus. I requested her to come again. I saw her two days afterwards—no sign of spermatozoa. I then told her that perhaps the seminal fluid all passed away in the act of rising and dressing. She thought it did. After further explanations, she readily agreed to send for me some morning, to verify the state of affairs. She was a very sensible woman, and fully understood the reasons given. A day or two afterwards, I saw her in bed about thirty minutes after sexual intercourse. The vagina was full of semen; and I removed about a drachm of it, and went home immediately for the microscopic examination. But, unfortunately, there were no spermatozoa. Not very long ago (seven or eight years), I had the idea that sterility was essentially a female infirmity; that men were never sterile, except when impotent; and that any man legally competent for the married state was physically so for procreation. But the microscope unsettles and settles all such vague notions. It is natural to suppose that a strong vigorous man is more fitted for procreation than a weak or puny-looking one. Some of the greatest lights of the profession have held such views as this. It was only two or three years before the death of the lamented Trousseau, that he said to me, in speaking of a case we had under consultation, "If our patient only had a man for a husband, all would be right." I subsequently found out that the husband's passions were strong; that his semen was perfect; that it entered the cervix in great abundance; and that the spermatozoa were there poisoned by a vitiated mucus. I mention this to show that we must not judge from appearances, when it is so easy to settle the question by the microscope.

No. 7, married nine years, sterile, had consulted several distinguished physicians, one in Germany, who told her that it was useless to try any further treatment, as she was now well enough, and it was the fault of her husband that she did not conceive. I explained to her that there was nothing easier than to determine that question at a single visit. She came the next day. I removed some vaginal mucus; also a mass of cervical, as large as a pea, that was just hanging from the os; also some from within the canal. The vaginal mucus contained spermatozoa, but, of course, they were all dead. The mass of cervical mucus that hung out of the os contained spermatozoa in abundance, all dead. The mucus from the interior of the cervix was wholly devoid of spermatozoa. Here the microscope settled the whole question. There was no longer any guesswork. 1. It was not the fault of the hus-

band that there had been no conception. 2. The seminal fluid did not enter the canal of the cervix. 3. The spermatozoa were killed by the cervical mucus, where the two came in contact. As the shortest and best method of treatment, I incised the cervix. After the subsequent menstruation, semen was found to enter the canal of the cervix. After the next period, they were found there in abundance, and all living. In three months thereafter, she conceived. In another three months, she miscarried, in consequence of a fall. Six months after this, she conceived again; and a year ago she became a mother.

No. 8. We often fail to cure curable cases, because the treatment is sometimes so tedious that both patient and doctor get mutually tired, and both are glad to quit. Madame ——, aged 34, had one child eight years ago; subsequently had chronic cervical inflammation; was cauterised too much. The cervix became indurated, and the os contracted. She wanted more offspring. I was in doubt about cutting open the cervix. A microscopic examination proved that the semen could not enter the cervix. Accordingly, I incised the os. After this, the semen entered the canal of the cervix, but its mucus killed all the spermatozoa. The mucus was not as clear and limpid as it should be, and it had white milky specks in it, looking as if it had been mixed with a little of the vaginal secretion. The lining membrane of the cervix was too red and rather granular. This was cauterised even up to the cavity of the uterus; and various other local, as well as general remedies, were adopted and carried out from time to time for twelve months. The character of the cervical secretion gradually improved, and at times showed some living spermatozoa, and again all were dead. This patient did not despair, notwithstanding a fruitless treatment for so long a time.

A sponge-tent had revealed long ago a small flattened cystic tumor in the canal of the cervix, situated on its posterior face, just at the os internum. I had repeatedly suggested the propriety of extirpating it. After all other means had been exhausted for restoring the cervical secretion to a normal state, the operation was agreed to. In June, 1867, nearly two years after we began the treatment, a sponge-tent was introduced; the canal of the cervix was fully dilated, and a cystic tumor about the size of the end of the little finger was extirpated. Three months afterwards, the cervical mucus was greatly improved; and on March 1st last, after a treatment of more than two years and a-half, I examined the secretions fifteen hours after sexual intercourse, and I had the satisfaction of saying, "At last, madam, I find the cervical mucus perfect; it is full of spermatozoa, and all very active. We can now hope for conception." Conception dated from that period, for she did not menstruate afterwards. But for the microscope, I would have dismissed the case as cured after the incision of the cervix uteri, and she would have remained in all probability sterile to the end.

Once I thought that the most common obstacle to conception was a contracted cervical canal, contracted at its outlet at the os internum, or throughout its entire length. But, if I were now asked, "What is the most frequent obstacle to conception?" I should unhesitatingly say, "An abnormal utero-cervical secretion that poisons or kills the spermatozoa." I can call to mind numbers of cases where, in former years, I incised the cervix, when the operation was satisfactorily done, and yet the sterility persisted. In some of these I have now not the least doubt that the husbands were sterile, and in others I have as little doubt that the cervical mucus was poisonous to the spermatozoa. If I had then possessed the exact knowledge of to-day, how much more satisfactory would it have been for me—how much better for my poor patients. I could go on for hours with cases to illustrate the principles already laid down. The foregoing are taken at random and are sufficient for the purpose. I have not treated a single case of sterility as such in the last six years, without determining the three questions so essential to success that were stated at the outset of this paper, except the half-dozen cases already alluded to, and in these the microscope at last revealed the truth.

Before closing this paper, pray allow me, sir, to say a word personal to myself, which is, at the same time, in vindication of the honor and progress of our glorious profession. When my book on *Uterine Surgery* appeared in February, 1866, it was noticed generally favorably by the medical press, and always honorably, with but one exception. The *Medical Times and Gazette*, one of the most excellent and influential journals of the day, conducted with great ability, and usually with liberality and decorum, condemned, in the strongest terms, my investigation of the seminal fluid, and said that "this dabbling in the vagina with speculum and syringe" was incompatible with decency and self-respect. Now, sir, for myself, I see no indelicacy or impropriety in taking mucus from the vagina and uterus for microscopic examination. It is no more indelicate, no more impure, than to investigate the character and properties of saliva, or bile, or urine, or fæces. And where is the scientific physician now-a-days, who could or would dare to give an opinion on any obscure and complicated disease without such investigation? To answer that question, sir, I beg leave to call to the witness-stand such men as Beale, Bence Jones, Hughes Bennett, Cull, George Harley, Sir William Jenner, George Johnson, Stokes, and the immortal names of Bright and Addison, and in my own country, the great names of Alonzo Clark, Austin Flint, Metcalfe, and a host of others. Sir, opposition and ridicule are ever ready, but never yet crushed out a great truth. With the simplicity of my nature, and with the honesty of my purpose, there can be no indecency, and no sacrifice of self-respect in making any necessary physical examination whatever, if it be done with a proper sense of delicacy, and with a dignified, earnest and conscientious determination to arrive at the truth—a truth without which every step is in the dark, but with which all is as clear as the noonday's sun.

MISCELLANEOUS.

MODERN HOMŒOPATHY.

From the "London Monthly Homœopathic Review" for June, 1868, we learn that Lord Elbury gave vent to a feeling of regret that the report of the London Homœopathic Hospital did not contain evidence of a greater development of the objects of the institution. The number of patients was not very large, and the clinical lectures had been given up, "owing to the attendance being so scanty as greatly to discourage the lecturers."

We also find that the fourth object of the founders of the Hospital was, not is, "to let inquirers see of what homœopathic treatment consists and *wherein it differs from other methods of cure*." But the position is now assumed, that "when a physician adopts homœopathy he does not bind himself to use medicines on no other principle. His first and chiefest obligation is to the patient." His second duty only is due to homœopathy, for he must do the best within his knowlege for the promotion of his patient's recovery or relief. "When a case, or part of a case, is without the sphere of the homœopathic law; in other cases where his knowledge of the practice

fails him; and, again, where a suitable palliative appears to be demanded, he is bound to use other than homœopathic means. This is always required in private practice," and is carried out in the London Homœopathic Hospital, although "a plan of treatment partly homœopathic and partly something else; one, in which one patient is treated in accordance with the law of similars, and another only partially so," will fail in securing no less than four out of the five objects, to achieve which the hospital was founded, viz: to obtain statistics by which the success of homœopathic treatment may be compared with other methods of cure; to demonstrate the success of pure homœopathic treatment; to teach the system in all its purity, etc., etc. All these great objects are subservient to the interests of the sick, for the editor says: "We all know and admit that there are cases in which the most conscientious and painstaking (homœopathic) practitioners feel compelled to fall back upon auxiliary (allopathic) aids to eke out a modicum of relief, or indeed to assist in curing."

Accordingly in the London Homœopathic Hospital, in which the cases are not of so serious a character as one is accustomed to see under treatment in hospital, black wash is applied to syphilitic sores, and ½ grain doses of mercury given internally. Cases of glandular enlargement in the neck were treated with tincture of iodine painted on externally. For cases of continued sleeplessness 1.48 of a grain of acetate of morphia was given every fifteen minutes.

The Hospital physicians repudiated, one and all, the fallacies and absurdities of Hahnemann about infinitesimal doses and dilutions. They frequently told inquiring physicians that "the doses were not a part of *their* system; that like cures like was all *their* creed; although it is not a matter of general or partial belief that morphia keeps people awake, that iodine produces enlargement of the glands, and black wash produces syphilis.

These Hospital physicians, and many others, have at last returned to the use of the medicines of the rational school in appreciable quantities; and the editor says the treatment in the above cases "was far too like allopathy to be advisable in a homœopathic hospital," although "so long as the doses of mercury did not produce mercurialism, our opponents cannot (or rather should not) complain." He also says he would avoid painting a glandular enlargement in the neck with tincture of iodine publicly in a homœopathic hospital, although he might unhesitatingly do it in private practice. And formally admits: "As regards the giving of morphia for sleeplessness, however necessary it may be considered by the medical attendants, it cannot be called homœpathic treatment."

The homœpathic editor trusts his readers will thoroughly understand that he has no wish to object to those methods of treatment *per se*, although unsuitable for a hospital called homœopathic.

We are hardly surprised to find that Dr. Yeldham, the principal physician to the London Homœopathic Hospital, in what is called an excellent speech, delivered at the annual meeting of the Institution, referred to the possible expediency of a middle school, which would embrace both homœopathy and allopathy; and Dr. Reith said he knew many homœopathists who are prepared for the coalition.

The editor of the *Homœopathic Review* "has not the slightest doubt that some such step, (or surrender) would be fraught with incalculable advantage to practical medicine," and it remains for us to see in what it should consist. If Hahnemann was so utterly mistaken about the efficacy of his infinitesimal doses; if every observation which he made upon the sick was an error; if every supposed cure was simply a recovery, it is not only not possible, but probable, that much of his reasoning and theorizing about the *similia similibus curantur* is also false? If the frank and practical homœopathists must make such large concessions about the dose, will they not also be soon obliged to make equally large concessions about the theory? If we can judge from the following prescriptions, some of the homœopathists can make every required concession:

Quin. sulph. gr. viij; ext. cannabis ind. gr. iv; ext. aconit. *rad.* gr. iv. Make 8 pills; 1 every three or 4 hours. F——r.

Hydrarg. sub. mur. gr. iij; mass hydrarg. gr. iij; aloes gr. iij; podophyllin gr. ⅛. Make 4 pills; to be taken at once. F.

Potassa sulphuret oz. j; aq. 4 oz. Solve. M——d.

Pulv. alum ustæ oz. iiss; tannin oz. iiss; tinct. myrrhæ 1 oz. For a gargle. M——d.

Magnesia sulphat. 3 oz.; tinct. cort. aurant. 16 oz.; acid. sulph. aromat. ½ oz. M.

Ferri persulphat. 1 oz.; adipis. 1 oz. M.

The *Medical Gazette* says: "Hahnemann taught that one grain of sulphur well rubbed up with 100 grains of sugar of milk could be developed into a medicine of tremendous energy. Some of his disciples of the Billy Barlow kind have made great improvements upon the simple proceeding of Hahnemann, and found out that two grains of sulphur mixed with 126 grains of conium, quinine, and morphine, are still more efficacious. See following prescriptions: Sulphur pura, gr. ij; ext. conii mac., ninety grains; quiniæ sulph., thirty grains; morph. sulph., gr. iij; podophyllin, gr. iij; *i. e.*, 126 grains of conium, quinine, morphine and podophyllin, to 2 grains of sulphur. Make 30 pills, each containing 3 grains of conium, 1 grain of quinine, 1-10 grain of morphine, 1-10 podophyllin, and 1-15 grain of very pure sulphur and give one or two several times a day in all cases in which sulphur was formerly considered useful, namely, in dyspepsia, biliousness, psora, eruptions, constipation, etc."—*Chicago Med. Exam.*

ON THE EARLY HISTORY OF SYPHILIS IN CHINA.

By George Thin, M.D., Shanghai.

The writer of this paper, having been assured by many Chinese scholars that syphilis has been known to exist in China for very many hundred years, availed himself of the kind offer of a learned native antiquary, to select passages from the writings of recognized genuineness and antiquity which allude to its existence. It is hoped that a very brief record of these may prove interesting to the profession at home.

Leprosy has been common in China from a very early date, and there are frequent allusions to it in early writers. These are often vague enough, and distinguished by poetic names. The earliest allusions to syphilis are also couched in vague language, and have been very often interpreted as belonging to leprosy. A careful examination of the scope of the passages shows that syphilis and not leprosy is the disease in question.

By the writers of the Tang dynasty, A.D. 618–906, we find the chancre denominated by a specific name, whose meaning is sufficiently distinctive.

What is believed to be the earliest notice of the disease is in the Shi King "Book of Odes," consisting of a collection of ballads, used by the people of the various petty states of China in ancient times, selected and arranged by Confucius, to the number of 311. One of these ballads is named "Fei ee," the name of a plant whose qualities form the subject of the song. The exact meaning of this ode is differently rendered by an-

cient commentators, but they all agree that the leading idea is a connection of this plant with a disease that renders sexual intercourse injurious. Han Ying of Yen, who lived in the earlier part of the Han dynasty, B.C. 200, and who collected a version of the odes, writes a commentary on this one. He says: "The above poem, the 'Ee is gathered,' is a lady's lament because her husband has the 'hateful malady.'" Another commentator, Sueh Chun, also of the Han dynasty, writes as follows: "The poetess complains that her husband has the 'hateful disease,' and that the conjugal duties are not fulfilled. The neglect is not to be endured, and she gives vent to her anger in the poem."

This is the most ancient notice of the disease. There is no specific literary name for it in the time of the Han. It is written of as the "hateful disease." We know that this means venereal disease, because of the phrase that Sueh Chun uses in expressing the debarring results of it. This phrase is composed of four words that literally translated mean, "There is no entrance to the path of man," and their use in this sense has been stereotyped from ancient times. The uses of the plant, *fei ee*, also confirm this. In the great standard compilation of Chinese Materia Medica, compiled three hundred years ago, *fei ee* is stated to be the ancient name of *che tsien*, the uses of which are said to be antisyphilitic and diuretic. This plant has been very long in use in China in venereal cases.

The exact meaning of the Chinese written character as transmitted in ancient records is sometimes difficult to ascertain. There are certain characters applied to severe types of disease which were applied not so much to indicate the specific nature of the malady as the structure involved. The character "lee," translated by Dr. Morrison, in his Chinese Dictionary, as "a virulent sore, a pestilence, noxious effluvia," is used by the old writers as one of the names of leprosy, and is also undoubtedly applied to syphilitic affections. Chang Kwoh Tseh, a writer of the earlier Han dynasty (2,000 years ago), says "the 'lee' disease, when severe, attacks (or penetrates to) the bladder," indicating evidently the genital organs as the parts affected. Of the characteristics of the "lee" disease that writers of the same date mention are destruction of the nose, and falling off of the hair.

"Fung," is another term applied by writers of the same early date to a disease with the characteristic symptoms of constitutional syphilis, although it is also commonly used for leprosy. Dr. Morrison gives as its meanings "a disease of the head; a kind of leprosy; applied to thirty-six forms of disease; it includes insanity, and certain forms of the venereal disease."

The *hill and sea classic*, whose antiquity is as far back as Chinese authentic history, says: "On the *Ku tung* hill there grows the *yung tsao* plant. Its leaves resemble willow leaves. Its root is like an egg. Eating it cures the *fung* disease. The *yung tsao* is the modern *tu fu lin*,* which has had long a repute for constitutional syphilis. It is stated in the compilation on materia medica, above referred to, that it cures chancres otherwise incurable. There is no record of its ever having been used in the treatment of leprosy.

Soo Tung-po, is a book entitled "Collection of Desultory Notes, A.D. 1000," relates that in the tenth month of the sixth year of the Emperor Yuan-Fung, he had a friend who was seized with the *fung* disease. He says: "Life and death fought together. The pain was worse than knives, saws, or the cangue. What guilt brought this on him? It was from too great a liking for wine and lust." There already existed a specific name for the disease in the time of the Sung dynasty, but from a sentiment of modesty, the authors call it by the general term of the *fung sickness*.

In the first Tang dynasty, a medical writer named Sun Sz Miao,* wrote a book entitled "A Thousand Prescriptions, Golden and Precious." In the same period, an author, named Wang Tao, wrote "An Authoritative Collection of Prescriptions." Both of these authors speak of the chancre as "the jealous semen ulcer." The Chinese name thus rendered is composed of three characters, whose sound is rendered *tu, ching, chwang; tu* jealous, *ching* semen, and *chwang* ulcer. This name was given to it in accordance with the theory of its production at that time believed—namely, that when a woman had connection with two men, the semen from the one was jealous of that from the other succeeding in producing impregnation, and thus rendering void its own chance of producing this result.

In the dynasty of Sung, Tow Han K'ing, the court physician, during the eleventh century of our era, published a work in thirteen books, entitled "A Complete Encyclopædia of Cutaneous Diseases." (A new edition of this work was published in 1717.) He speaks of the chancre as the "mould ulcer." We find in the name he gives it the origin of the modern term for a bubo. The character he uses sounds *mei*, and means *mould*. The modern name for chancre is the *yang mei* ulcer. The *mei* here used is the same in sound as that translated *mould*, but is written differently, and is represented by a character which means a *prune*. The word *mei*, being in common use in the spoken language, became confounded in its meaning with another word of the same sound, and in course of time was superseded in written language by another character which, though it has the same sound, presents to the eye an another idea. This transposition of character, which is common in the Chinese language, and the want of sufficient erudition, caused the medical writers of the Ming dynasty, A.D. 1368–1643, to confound secondary symptoms with common ulcers, and explains their being ignorant of the disease as described by the old authors above quoted. But we find that tradition had transmitted to them the use of the same remedies. Sun Sz Miao, in his "Thousand Prescriptions, Golden and Precious," quoted above, gives, as a curative application to the "jealous semen ulcer," broiled honey, mixed with *kan tsao* (glycyrrhiza glabra) powder. We find the writers of the Ming dynasty recommending the same treatment for chancre.

The vagueness of the ancient terms may have helped to mislead them. The earliest writers we have seen above include syphilis under the term of *fung*. After the "jealous semen ulcer" had found its way into type, it was still more respectful to general taste to use the vaguer term. The name for leprosy is *ma fung*, and hence a confusion of the meaning of the three terms, "jealous semen ulcer," *fung* and *ma fung*.

There is a tradition mentioned by a writer 400 years ago (utterly untrustworthy), that syphilis came from beyond the Ling Piao hill, in Canton province.

To give a brief summary of the above statements, it is to be noted that,—

1. In the book of Odes is a song, the theme of which is understood by the most ancient Chinese commentators to hinge on a disease of the sexual organs, which was common enough to be connected with the idea of a specific remedy. The odes were collected by Confucius, who was born B.C. 551.

2. The commentators of the earlier Han dynasty, in commenting on this ode, give this disease a recognised name, "the hateful disease," state that it debars from sexual inter-

*smilax pseudo-china (Linn, Thb.)

*Sun Sz Miao died A.D. 682, upwards of 100 years old, so that he was born in the Suy dynasty, which preceded the Tang.

course, and that the remedy for it is a plant which, from the earliest records to the present day, has been used for the treatment of syphilis. These commentators lived B.C. 200.

3. From the reluctance of Chinese authors to use in their writings the vulgar names of their time for venereal disease, and from the same feeling prompting to the use of general and collective terms for disease for its designation, the imagination of the student being supposed to supply the want of more defined information, a general ignorance as to the very early existence of syphilis has been generated among Chinamen, even of moderate erudition. Facts related by writers who lived about the beginning of the Christian era, about cases to which these general terms for disease were applied, point out these cases as venereal.

4. In the seventh century, the venereal chancre is described under a specific name, which places its nature beyond doubt. From that time onwards various allusions to it are found in literature. In modern times these ancient notices had been overlooked, partly from the change of nomenclature, and partly from the works in which the notices occurred not being likely to come before practitioners as objects of study.—*Edin. Med. Journal.*

A WOMAN'S ESTIMATE OF WOMEN.

The *Medical Times and Gazette* thinks that the naiveté displayed by the charming Miss Becker, in her address to the British Association, on the mental superiority of the female sex, must have been somewhat amusing to that dignified body. It says:

"This lady's propositions were so well rounded, and so categorically arranged that they must have overpowered many of our weaker brethren. Her utter disregard, however, of the necessity for urging something in support of these propositions was not a little characteristic of the lady debater, and the illustrations afford a happy example of the kind of science which is popular in the ranks of the *ci-devant* weaker branch of the human family. 'The superiority of sex was not always on the side of the male: witness bees,' said Miss Becker. This was most infelicitous. What is the domestic economy of the beehive? True, the males are not considerately treated, but then the really mentally superior and active members of the commonwealth are creatures we should be sorry to see Miss Becker selecting for her analogy—endowed with intelligence, but *devoid* of sex. The only female in the establishment leads a scandalous life of polyandry, is made a matron of as soon as she reaches maturity, is allowed to take no share in the affairs of the republic; and, finally, is kept hard at work perpetuating the species during the term of her natural life. Is this Miss Becker's notion of the female of the future?"

INTESTINAL PUNCTURE IN TYMPANITES.

Under the advice of Dr. Foussagrives, intestinal puncture, as a last resource, has been several times practised at Toulouse, on two patients suffering with tympanites. In the first case, the abdomen formed an immense mass; the patient was perfectly cyanosed and suffocating. An exploring trocar was inserted into the most distended part of the lower umbilical region. The gas escaped so violently as to extinguish a candle. The distension returning next day, two fresh punctures were made in different places, and gave so much relief that the life of the patient was prolonged four days. In another case six punctures were successively made, until the gases were naturally evacuated, and the patient cured.—*L' Un. Med.*

THE HIPPOCRATIC OATH.

I swear by Apollo, the physician, and Æsculapius, and Health, and All-Heal, and all the gods and goddesses, that according to my ability and judgment, I will keep this oath and this stipulation—to reckon him who taught me this Art equally dear to me as my parents, to share my substance with him, and relieve his necessities if required; to look upon his offspring in the same footing as my own brothers, and to teach them this Art, if they shall wish to learn it, without fee or stipulation; and that by precept, lecture and every other mode of instruction, I will impart a knowledge of the Art to my own sons, and those of my teachers, and to disciples bound by a stipulation and oath according to the law of Medicine, but to none others. I will follow that system of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from what is deleterious and mischievous. I will give no deadly medicine to any one if asked, nor suggest any such counsel; and in like manner I will not give to a woman a pessary to produce abortion. With purity and with holiness I will pass my life and practice my Art. I will not cut persons laboring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick and will abstain from every voluntary act of mischief and corruption; and further, from the seduction of females or males, of freemen and slaves. Whatever, in connection with my professional practice, or not in connection with it, I see or hear, in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret.

While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the Art, respected by men in all times! But should I trespass and violate this Oath, may the reverse be my lot!

INDIA-RUBBER SPONGE.

This seems a very ingeniously contrived substance. It is an artificial sponge, made apparently by filling india-rubber in a fluid state with bubbles of gas, and then allowing it to harden, the result being a mass of india-rubber as full of holes and pores as a French roll. It is very elastic, will take its fill of water easily, and may be used for many purposes instead of stiff sponge—as, for instance, in the bath as a flesh brush, for cleaning paint, windows, etc. But it also seems capable of being made into pads for fracture, hernia, etc., and, if so, its lightness, pliability, and elasticity may make it of great service. *Med. Gazette.*

To Preserve Steel Goods from Rusting.—The simplest way of preventing the oxydation of polished iron and steel goods is to dust them over with quick-lime. Where articles are required to be preserved for many months (such as polished steel grates), strips of paper freely covered with powdered lime are to be wrapped around the bars; or they may be placed in cases, and interstices filled up with quick-lime. Piano-forte wire and small goods are preserved in the same way. The *rationale* of the method is this—steel will not oxydize in *dry* air. The presence of quick-lime, from its hygrometric properties, secures dry air, and thus indirectly the lime preserves steel from rust. This is not a new plan, but it is the method adopted by the majority of the Birmingham houses.—*Journal of Applied Chemistry.*

ORIGINAL COMMUNICATIONS.

HYGIENE, AND THE SEWERAGE OF SAN FRANCISCO.

By A. B. STOUT, M. D., San Francisco.

[Continued from California Medical Gazette, October 8, 1868.]

The rain has fallen, and copiously enough partially to flush the sewers. WATER is the only radical disinfectant; and, until a rational system of washing the sewers is introduced, with an unceasing stream of water descending with force and velocity, the rain must be depended on to obtain the desired effect. In the present state of the sewers and consequent health of the city, torrents of water for a week together are demanded; and were the clerk of the weather a reliable personage, we would have him deliver these torrents at night, in order to have clear days for trade and pleasure. As it is, however, we must be happy to receive the supply when it is awarded. Still, we may thank the clerk's discretion; for had the water descended in torrents—enough at once to cleanse the Augean stable—the effort would have been disastrous to the city in the extreme. The openings of the sewers along the city front are all strangled. The mercenary builders along this proscribed, though invaluable, line of the city, whose only thought and greed are high rents, have entirely neglected the substructure of the new improvements, and the termini of the sewers are far into the city, choked and broken, their contents having no other escape than to soak through the soil and blend with the ordure already present. But the most fluid portion only can ooze away in this manner; the balance remains to manufacture perfumery. This rises and diffuses itself, through the channels built to conduct it, over the city, and, as it were, irrigates the atmosphere. If, now, in this state of things, the rain had fallen in torrents and rushed toward the bay, it must have overfilled the sewers, and the backwater, loaded with infection, would have risen through the cesspools and overflowed that part of the city, perhaps as high up as Front street.

We ask permission now respectfully to touch on another subject. The bulkhead, so indispensable to commerce, as well as to the formation of solid, available land inside of this wall, is now in course of construction. We contend that all that important part of the city extending from Vallejo to Market street, and condemned as "made land," can be made as substantial for buildings as the higher business portions of the city: for instance, Second, Third and Fourth streets. Especially true is this for earthquake-proof buildings, which will in future cover more area, and have less elevation. Venice—with its marble palaces, its grand old Plaza, its lofty churches and towers, its massive halls of justice—is built in the water. Its residences are entered in a boat (gondola); an esplanade of solid hewn masonry receives the visitor; he ascends by a spacious staircase to the first floor (*piano-nobile*), or reception rooms of the palace. All these enormous weights are built on solid hewn masonry beneath the water. The edifices are also entered from the streets, which have canals navigable for gondolas through their center. These canals have lateral entrances into the palaces. Why, then, should not our little city front be made an equally solid basis?

The construction of this bulkhead is consigned to Harbor Commissioners, who have intrusted the Chief Engineer's department to Mr. Lewis. Of the dimensions of this great wall we make no comment, for of course that scientific corps knows the better; but it is built by dredging a deep channel, not to bed rock, but estimated to be deep enough. This channel is filled with tons of rubble stone to a certain elevation, near to city grade, and time given it to sink and settle. When thus sufficiently buried, as calculated, in the mud to resist all motion, and stand its ground, the superstructure of massive hewn granite will be built upon it. A noble and costly work—though it may be feared that eventually it will serve only as a sort of brake to back the mud from a future wall to be built outside of it. Whether the engineers have estimated that the culverts for the sewers of the city are to pass through the rubble basement, depending on their dip, or through the granite superstructure, certes, up to the present time they have not expressed. It cannot be imagined that in the sectional contracts these outlets have been forgotten; but now, the bulkhead is an unbroken line, and every sewer, from Vallejo to Clay street, is dammed up. Before the rubble can settle, and the wall of hewn granite be finished, from two to three years may elapse. If a doubt existed as to their ultimate placement, could not at least temporary iron pipes, say 12 in., have been let into the sewers, been secured with brick and cement, and carried through the rubble into deep water, to relieve at once the city from this destructive pestilence? It cannot be supposed, nor the idea admitted for a moment, that all this garbage, with its accumulating masses, can be allowed to fester there until the bulkhead is finished.

We would mildly suggest a procession of all the dignitaries of the city: 1. The Board of Health; 2. The Health officers and staff; 3. The Board of Commerce, whose President is President of the Board of Health, and necessarily deeply interested in the commerce of the city front; 4. The Board of Supervisors; 5. The Harbor Commissioners; 6. The City Engineers and Surveyors; 7. The Superintendent of Public Streets; then a few interested in the public health, viz.: a deputation from the Press, and a few of those interested in the health of their families. The procession shall form on the west side of Front street, facing east; the right flank resting on Washington street, the left on Clay. It shall march at noon, in sunshine, down the north side of Washington to East; cross East; countermarch up the south side of Washington to Drumm, carefully observing the streets; through Drumm to Clay; down Clay to East, and countermarch again by the south side of Clay to the place of rendezvous. The procession shall then halt, and, after snuffing carbolic acid or chlorine, consult. If they do not exclaim that it is the most atrocious, long-continued neglect, in a civilized city yielding its thousands for taxation, with force to compel proprietors to do their legal duty, then will we forever cease to complain. Man-traps through planking, in which a man walking in the dark may step and break a leg, or perchance pass bodily down, are not to be mentioned; *there* is a vast open cloacum, with uncounted feet of the Washington-street sewer twisted and coiled in the midst, like a dead anaconda.

While the anxious cry has been, "Flush the sewers, disinfect the city, destroy the gases, carbolize, use chlorination, in mercy sanify the city," nobody has thought to open the orifices of the sewers into the bay and let their foul ordure out. Uptown, on unaccepted streets, if only a few cobbles are loose, an imperative order comes to fill the holes within three days, under penalty. No such order appears to have prevailed between Drumm and East streets, on Washington street. A voice may exclaim, "Why did not you say all this earlier?" The answer is: Two months' illness—malarious fever, down to a few degrees above zero, poisoned with the noxious airs we write of, almost to the brain's center.

While the anxious call has been, "Flush the sewers," the Water Company has reluctantly yielded its water. The

Times announced that if money to any amount would stay the pestilence, in forty-eight hours the ever-noble and generous merchants of San Francisco would supply it. Had the Water Company exclaimed, "For forty-eight hours we will flood your sewers, only show us where the water shall enter; take half our supply, and for forty-eight hours let the people use half-rations," an endless gratitude, at small cost, would have been their reward. It grumbled, "*Franchise!*"

Let the city own the water floods; let the city welcome the immigrant to use the wharves without a toll-tax, and San Francisco will flourish. Let wharfage on tonnage cease, and Commerce will thrive.

It has required the ordeal of a fearful epidemic to awake public attention to this question of vital importance—of life and death—education—the rearing of youth with stalwart strength, or with impaired constitutions, from the incessant inhalation, from the cradle to maturity, of malarious and poisonous atmosphere. It is a question before which that of the Earthquake Committee, interesting and valuable as it is, inaugurated in the true spirit of national free inquiry, which only America understands and practices, sinks into a subordinate rank. In this age, structures are built for the present century, to let successors alter, without loss, to suit the improvements of the time, the fashion, and their own taste. Why build strong houses for short-lived tenants? It is a question which admits no delay. Seven months of "dry season" are near approaching. What was keenly felt in 1868 will be redoubled in 1869. *Prophylactics, i. e.:* remedies taken anticipative of disease, to parry its attack, are solicited and dearly paid for; as long as taking a pill or two will do, folks will bolt them; but when the great radical preventive is suggested, the sapient governors of public health, with millions of money, if necessary, in their coffers, will sleep in apathy—an apoplexy of mind, with insensibility to themselves, but full of death to the vitality, the commerce, the aggrandizement of San Francisco. If the city is the cleanest in the world, it will enjoy the possession of the cleanest immigration; if reputed unhealthy and redolent of villainous odors, it will only receive the least desirable population. If the city fail to sustain its repute for health, daily fanned with pure air from the ocean, it will require but a slight deviation in the great current of trade, and it, like Venice, will sink into insignificance. A few years ago, one hundred dollars per annum would permit you to hire in Venice a marble palace. India, China, Japan, Australia, Oceania, will pour their wealth in vain; the city will wither, and its prestige be lost.

The true fault is in the fact that no rational system of sewerage has been thought of or adopted. To run costly channels through the city, and make money on contracts, appears to have been the prevailing idea.

The only recourse is to create this system, as suggested: build reservoirs on elevated sites, with engines; pump water from the bay at flood tide; establish a net-work, like arteries, of canals of small caliber, and let the water from the reservoirs rush with velocity through them. The process is simple, far more effectual, infinitely more economical, and the result absolute—the certain sanification of the city.

The last paragraph of our former article is now quoted:

"The inauguration of such a system calls for a special department in the Engineer's Bureau of the city. The work is beyond the competency of a Street Commissioner, elected by popular caprice. An engineer's department, endowed with power and supplied with faithful assistants and deputies, possessed also of ample funds, is far more capable to conduct a system comprising elaborate details and cultivated knowledge in a great variety of the departments of science."

The initiation of such a system is simple. Its indispensableness is not a question. The ultimate economy must be obvious. Short discussion can decide a truth so manifest. The influence of the Board of Health, sustained by that of the Board of Commerce, will so convince the Board of Supervisors that after small debate that honorable body may order the formation of a Board of Sewer Commissioners, and the obstacle will be surmounted. The Legislature cannot fail to confirm their action. The most important feature of this operation is the formation of the Board of Commissioners. They will appoint their own Chief Engineer. We want no electoral candidates, but educated and experienced scientific engineers, selected from the best the United States possesses. We want the Alexanders, the Williamsons, the Kirkwoods, the Julius W. Adams', the Chesbroughs. With such a corps San Francisco may be sanified, and not a cent more be expended than the actual requirement. The honor of such officers stands higher than mercenary thirst.

By a most opportune good fortune an authority has been presented which will carry more weight than can the testimony of a writer who enjoys no influence of wealth, political position, or general popularity. As amply as the space allowed will permit, this authority will be quoted. It bears with it the incontrovertible evidence of experience and perfect success.

THE BROOKLYN WATER WORKS AND SEWERS:
Prepared and printed by order of the Board of Water Commissioners, with 59 lithographic plates. 1867.

The article "Sewerage Works," in this volume, is that which interests San Francisco. As long ago as 1857 Commissioners were authorized to prepare a SYSTEM. James T. Kirkwood, author of this treatise, was appointed to prepare this system. Julius W. Adams, having been engaged subsequently, digested the plans, and is truly author of the work.

The existence of this work was entirely unknown to me when my suggestions on sewerage, published in the MEDICAL GAZETTE, and in the *Times*, October, 1868, were presented; nor am I indebted to any one whatever for any hint upon the subject.

In Brooklyn, previous to 1857, five and a half miles of sewers were built; but not with a view to receive house drainage. They were built large enough to admit men to clean them. The scantiness of water, and the want of dip in the soil, prevented the use of other measures.

The introduction into cities of large supplies of water has obviated the inconveniences previously suffered. Quoting from the report of Mr. Kirkwood: "This change consisted in the introduction of SMALLER SEWERS, the sizes of which were governed solely by the amounts of sewerage and rain water to be passed at any given point; their enlargement beyond the requirements above mentioned, was considered unnecessary and otherwise objectionable."

It appears that long and sharp controversies occurred among English engineers upon this change of system. In the meantime PIPE SEWERS were introduced, and this only served to warm the contest, as it brought in the interests of *brick* versus *pipe*.

Finally the rational system prevailed, and in accordance with the nature of location and volume of material to pass, sewers or pipes, large or small, *but calculated to the special requirement*, were adopted, as a competent engineer or a Board of Engineers decided.

Mr. Kirkwood again says: "As regards the necessity of entering sewers, which was dwelt upon so much ten years ago, the successful use of small sewers shows that this necessity does not exist; they have been found safe and effective when properly built, and less troublesome as regards cleansing than the old sewers."

The volume and velocity of the water save herein many thousands of dollars in those expensive entrances called "manholes," constructed as they are of brick, curbed with hewn stone, and *decked* over with heavy iron covers. Again, we are spared the lamentable, the sickening evidence that man may become so poor, or so criminal, that he is compelled to descend to such depths to earn his daily bread.

Kirkwood, in his compliment to the ability of E. S. Chesbrough, City Engineer of Chicago, says:

"In Chicago, where pipe sewers of twelve inches diameter are used, with an inclination of one to five hundred, tanks on wheels, wherewith to flush them occasionally, have been used. *Where, however, the leaders of dwelling-houses are connected with the house drains, this precaution has not been found necessary.* * * * The house sewerage spoken of above does not include rainfall, for in this city [Brooklyn], and in all cities within the limits of grade mentioned, the daily flow through the drains must be able to keep them free, independently of any aid from rain."

This fact controverts all assertions that house drains should not be permitted to enter the street sewers. They are an advantage, and this independently of rain-fall.

It is conceded that "the greater the concentration of the minimum flow [of the sewerage], the greater will be the carrying and cleansing power in a sewer of any given inclination, and the concentration being greater as the sewer is smaller, the minimum sizes of sewers practicable" are to be calculated.

An admirable comparison, too long to quote, between the strong, glazed earthenware pipes, of twelve, fifteen, and eighteen inches in diameter, used in the Brooklyn works and brick sewers, may be found in this Report (Kirkwood) on Brooklyn Water Works and Sewers, page 84, and in which the *glazed pipes* are proved to be far superior.

Those intimately interested in this subject will find invaluable information on pumping engines and the lifting power to reservoirs in the above work.

Any comparative computations of relative cost would be now unavailable. All enterprises of magnitude require in their incipiency a large expenditure of capital; but when they have been rationally devised, return in the end profitable dividends. To any one who will make estimates, it will be apparent that the rational system, with its order and precision, cannot fail to effect a great economy.

Those who hereafter receive a city with a perfectly organized sanitary system, will be very well pleased to pay their share of the bonds.

It may, notwithstanding, be of interest to make some extracts of the cost of the present system—an amount expended as much to engender disease, as to carry off the refuse of the city. It will bear witness to the advantage of a faultless scientifically organized system, and the present defective caricature institution.

The Report of the Street Superintendent, in the Municipal Report of San Francisco, ending June 30, 1868, states that there are of sewers 38 miles, costing, for 1868—

Brick sewers	$237,798 45
Redwood do	47,423 73
	$285,222 18
The whole cost of sewers since their commencement in 1858–9 to June 30, 1868	$1,500,937 18

This gives for 38 miles, per mile, $39,498.34; or, per lineal foot, $7.48.

To these sums must be added the cost of cesspools and manholes, viz.: from $150 to $175, gold coin, each, for the former, and $50 to $75, gold coin, for the latter. At the rate of four cesspools at the street intersections, the amount may be easily calculated. Observe an economy in the rational system. Manholes are dispensed with; the cesspools, now so defective, may be entirely changed, and diminished in size: thus, to an iron hydrant may be attached an iron basin, of large size, inserted in lieu of cesspool mouth. This would be followed with a large S-shaped water valve, say ten or twelve inches in diameter, and communicating by iron or glazed pottery-pipe with the main sewer. In this same hydrant could be managed an offset-pipe, to serve for street sprinkler.

In iron castings, then, of one or two pieces, the whole apparatus may be condensed, and connecting with the water supply falling with velocity, would keep perfectly clear, and the S-shaped valve or trap be never dry. Such castings would not cost more than $50 or $75.

The addition of street sprinklers to this system, which can be attended with the same punctuality as lighting the gas-burners in the street, will economize to merchants, by "laying the dust," uncounted thousands of dollars, add to the salubrity of the city, and render the promenade on the streets, in windy weather, vastly less intolerable.

DISINFECTANTS.

Water, administered as stated, is the only *radical* disinfectant, because it immediately removes the substances which engender effluvia. It may be said that a bucket of sewerage cast into a sewer on Taylor street, under the new system, will, in fifteen minutes, be in the bay. Under such rapid action no foul gases can be generated.

Ventilation with Atmospheric Air.—Except the above, all disinfectants are but partial in their influence, and inefficient. Before the rational water system can be inaugurated, an indefinite time must elapse. It is only to obtain relief in this interim that palliatives must be resorted to. A current of atmospheric air may be constantly maintained through the sewers, by establishing at the lowest discharge end of these canals ventilators, such as are used in the great oriental steamers. These, well guarded from injuries by malicious mischief, will admit air in abundance, while the draught may be accelerated, by constructing at the most elevated and remote termini of the sewers tall, galvanized iron pipes or chimneys.

Chlorination.—Chlorine, as a disinfectant, is valuable in the small way. It may be used in houses infected by small-pox. It destroys all infectious gases, but is itself destructive and highly poisonous: hence, if liberated in excess through ignorance or carelessness, in tenements where there are many residents, especially children, it might easily prove fatal. Its chief objection is that it only destroys the existent emanations. It does not prevent the generation immediately after of more from the same source. The benefit derived therefore from this agent is exceedingly transient. Derived from muriate of soda (common salt), by the chemical action on it of oxide of manganese and sulphuric acid, it is very cheap. In itself it costs but little, but add to that cost the expense of apparatus to generate it and diffuse it, the salaries of the agents who administer it, the toil and trouble to keep up constantly the supply, and it will be apparent that the combined expense would be a very heavy burthen.

Again, how can the Health officers hope in this way to neutralize the effluvia produced and retained in thirty-eight miles of sewer?

Carbolization.—The employment of carbolic acid must, like the former, be limited, though it possesses a wider range of utility. It is infinitely more manageable, and almost without danger. It has also a more permanent effect upon the gas-producing agents it meets in sewers in arresting their decomposition. There is nothing offensive in its emanations, or but

very moderately so. Were it indispensable to prove its disinfectant power, the writer would not in the least fear to put on the clothes in which a small-pox patient had succumbed in sixty hours after his death, or in the time necessary to apply the substance properly, wash dry, and iron the garments.

To apply carbolic acid as a sewer disinfectant would probably be a failure; but where flushing is attempted, from casks mounted on wheels, we think 17 ounces of pure acid to 200 gallons of water would render the fluids it encountered disinfected. For all the water pipes leading through houses and included in the plumber's department, its free use is invaluable.

Sulphite of Lime.—"The agents of the Board of Health of London find no disinfectant for sewers so quick and certain in its action as Macdougal's—the chief ingredient of which is *sulphite of lime.*" (See T. K. Chambers' work, "The Indigestions," p. 261. 1867. London Ed.)

Preventives to Malarious Infection.—The best of all preventives is a well regulated state of health, obtained and preserved by moderation in all things, both intellectual and physical, which appertain to the vital functions. The strong and the weak are all liable; but those who have studied and lived up to hygienic principles, and especially as regards the digestive organs, may oftentimes live for years in marshy regions or unhealthy countries, while those addicted to excesses yield early to the malaria. We think the assertion may be ventured, though not aware that it has been previously stated, that the malarious poison may be generated within the human body. If large accumulations of digested matter are allowed to remain in the abdominal organs, and the proper degree of animal heat be excited to produce decomposition or fermentation, why may not the same results follow as during the hot months in paludal districts? Testimony to this idea is found in the rapidity with which many cases of fever and ague are cured after one or two lively cathartics, and with a very small amount of quinine. If so, let the inquirers for preventives turn their eye inward.

The true idea of preventives is to apply a remedy or an antidote to the malarious intoxication, while it may be feared that its germs or molecules exist in too small quantity sensibly to affect the health, but are awaiting the accession of other germs to produce an outburst of disease. Employed in this view they are of advantage; but otherwise their premature use is an abuse. Twenty or thirty grains of quinine have prevented many a Panama fever, but discretion in the general hygienic laws have parried still more attacks. Both the wise and the foolish may learn more of this in the graphic article on Panama fever in the December number of Roman's "Overland Monthly."

When, however, preventives have been steadily used for a length of time, quinine, old Bourbon, and vigorous diet, and finally the malarious infection, equally steadily absorbed, triumph; then comes the tug of war—the enemy finds his victim without ammunition, and destitute of provisions.

Hercules appears known only for his physical strength, but he must have been equally renowned for his strength of mind, and ability as an engineer. When invited by the King of Elis to cleanse the Augean stable, which baffled all other skill, he performed the task in a single day. The record does not state the time, money and men Hercules employed to canal the mountain lake, or divert a river from its course, to prepare his mechanism for the day given, when he suddenly let on his water with a rush, and flushed the premises.

It is as though it were simply related that a great and costly ship arrived in San Francisco harbor. In a great storm she had broken her vast ribs on the rocks, and was sinking.

When the renowned giant, Von Schmidt, in an hour lifted the ship clear out of the water, so that workmen, dry-footed, went under her, and mended the rent, when the giant gracefully replaced her in the sea, not a word is said of the time it took to build the dock.

How joyfully will the San Franciscans assemble to celebrate that given day when the powers that wield the strength of the city shall invite them to witness the first flush of the sewers on the rational system.

PATHOLOGY AND TREATMENT OF UTERINE DISPLACEMENTS.

By JOHN SCOTT, M.D., F.R.C.S.I., F.E.S.L., etc.
Surgeon to the California State Woman's Hospital.

[Continued from page 106.]

ANTEFLEXION OF THE UTERUS.

Till comparatively lately the existence of this displacement was either altogether overlooked, or so seldom recognized that it received only a cursory notice in the published writings of gynecologists; so much so that at a meeting of the London Obstetrical Society, a little more than two months ago, we have it mentioned "that so eminent a teacher as Dr. Churchill, of Dublin, had never, as yet, met with anteflexion of the unimpregnated uterus." This startling assertion, coming as it does from one who is considered an acknowledged authority on uterine affections, sufficiently justifies my previous statement, namely: that a diagnosis founded on the usual methods of examination, and with the aid of a conical speculum, is simply worthless. Not only is anteflexion not unfrequently met with, but it can with truth be stated that of all the misplacements to which the uterus is subject, this special disorder of place is the one most frequently met with. It has been contended that the uterus, in its natural condition in the pelvis, is always slightly anteverted, and that to call such a position a *pathological* one, is erroneous. That the organ may incline slightly forward while the body is in the erect position, and that it may be temporarily misplaced by distended bowels, or the existence of an enlargement between it and the rectum, I fully admit; but I am firmly convinced, as the result of extensive experience, that such a position is not normal, and is seldom found compatible with health. Anteflexion is, however, a stage in advance of anteversion, and the organ having become flexed on itself, the condition is eminently pathological, and deserves our most serious consideration. It is met with equally in the single and the married, and in its more marked forms entails the greatest local and constitutional suffering. Of dismenorrhea, in all its varied and severest forms, it is the prolific source, and in the married it is the commonest cause of confirmed sterility, with all its attendant ills. Anteflexions are either congenital or acquired. In the former, they are found in connection with deficient development of the uterus, the imperfect or almost complete failure of its functions, and all the symptoms of retarded puberty. The canal is only from one and a half to two inches in depth, and the os is usually so small as barely to admit the uterine probe within the cavity. In such cases marriage has been recommended, in the hope that pregnancy may take place and so modify the nutrition of the organ as to effect a cure. More commonly the stimulus to which the organ is subjected is productive of suffering instead of benefit, for in conjunction with an imperfectly developed uterus, the flexure creates a mechanical obstacle to conception, and sterility is the almost invariable result. A more extended knowledge of hygienic

principles, a more rational mode of dressing, feeding and exercise—in other words, a greater regard for the physical well-being of the young—would doubtless diminish the number of these cases, and at the same time prevent the access of more formidable affections, with which they become eventually associated. *Acquired* anteflexion in the *unmarried* is chiefly occasioned by the sudden arrest of the catamenial discharge (from whatever cause), with consequent congestion and enlargement of the anterior wall of the uterus. In the *married*, by abortions or miscarriages, or by an arrest of involution after parturition; an imperfect development of the neck (particularly at the vaginal junction), with a disproportionate development of the body of the uterus, will also conduce to this affection; and in any case we are sure to find, with the flexion, such an amount of textural alteration as will account for its occurrence. A flexion, however slight, having once occurred, is liable to perpetuate itself, for the circulation having become obstructed, the return of the catamenia only adds to the mischief by producing additional congestion and hypertrophy of the dependent part, while the retardation of the menstrual flow not unfrequently produces endometritis and degeneration of the mucous lining of the cavity itself.

The *symptoms* of anteflexion are usually sufficiently distinct, though most of them are common to other chronic uterine affections. Pain on connection, tenderness over the pubic region, a sense of dragging about the loins, inability for exertion, a feeling of weight and tension of the abdominal walls, low down in front, which necessitates artificial support, with, perhaps, leucorrhea or puritis, are usually present.

Dysmenorrhea is usually a prominent symptom, and is at times so excessive, that the patient will roll about in agony for hours before the discharge makes its appearance. One symptom is seldom absent, and if the affection is severe, it tends to assume a prominence which sometimes entirely masks the original disease. I allude to vesical irritation, existing in some cases as a frequent desire to micturate, which is much increased at the menstrual epoch, while in others it progresses till it assumes the form of chronic cystitis, and is productive of the severest suffering to the patient. Under this head may, I think, be included most of the cases of vesical or urethral disease, to which Dr. Braxton Hicks has so ably called the attention of the profession, and for which he has prescribed medication of the bladder and urethra, but, even on his own showing, with imperfect results.

The mechanical pressure on the bladder of the overhanging fundus will sufficiently account for the frequent micturition in the simpler cases, while in others, where inflammation of the front wall, of a more acute nature, exists, we have no difficulty in conceiving its extension to the bladder itself. In my experience I have found that the removal of the anteflexion, and the endometritis with which it is associated, is generally all that is necessary for the cure of this troublesome complication; but it does occasionally occur that special medication of the bladder is also needed, and if we have taken the precaution to treat the uterine affection *first*, and the bladder afterwards, we can anticipate the most gratifying success to our efforts. The catamenial discharge may be more frequent and more prolonged during the earlier stages of anteflexion, but as it progresses the flow generally becomes scantier, till, as Dr. Emmet observes, it disappears altogether, and a premature change of life is the result. The effect on the constitution of the gradual or total suppression of the discharge, is usually evidenced by frequent disturbance of the circulation in the form of flushings of the face, bilious attacks, vertigo, etc., with a tendency to the development of phthisis, or other viscual disease; while in others an unhealthy obesity takes place, with a liability to cerebral lesions at the time when the usual change of life occurs in women. Uterine disease, not of a malignant nature, seldom kills of itself, but I think it may be laid down as an accepted fact that its continued existence tends to develop any constitutional weakness that may exist, and render the system liable to intercurrent affections, from which it might otherwise have escaped; and if we take into consideration the importance of the functions which the uterus discharges for a period of about thirty-two years of a woman's existence, it is difficult to overrate the evils which their interruption or suspension will occasion.

The *diagnosis* of anteflexion in most cases is simple enough, but in patients where the abdomen is loaded with fat, there is considerable difficulty in bringing the uterus between the grasp of the hand applied externally, and the fingers in the vagina; and where the utero-sacral ligaments are short, or interstitial deposit has taken place between them, and the uterus is in consequence far back and out of reach, manual examination may at first fail to detect it, but in both cases the sound comes to our aid and clears up the difficulty. The patient should be placed on the back, and the knees well flexed on the abdomen, with the dress completely loosened. One or two fingers should then be introduced into the vagina, while the other hand is applied to the hypogastrium, and by this means the uterus can be grasped between both hands, and its position, size, and conformation accurately determined. If anteflexion exists, the finger applied to the posterior wall of the cervix will usually detect the convexity shown in the accompanying drawing, and then applied in front, it will dip into a *sulcus*, which, in the majority of cases, exists at the seat of the vaginal junction, while between this and the hand outside the overhanging fundus, rounded in form, will be found resting on the pubis, or nearly on a line with its upper edge. The existence of a fibroid in or upon the anterior portion of the fundus will cause anteflexion, and when the flexion is acute, the rounded and well-defined fundus will readily give rise to the suspicion that it exists. Its diagnosis is not, however, difficult, for the growth of a fibroid is seldom uniform, and an accurate manipulation will detect irregularities in the surface which do not exist in anteflexions not thus complicated, while the introduction of the sound, with the patient on the back, will at once demonstrate the nature of the case. The patient is now placed on the left side, with the knees well flexed on the abdomen, the left hand behind the back, and rolled over on the chest. Sims' speculum is introduced. The tenaculum having been inserted into the anterior lip of the os, the uterine sound properly curved is carefully passed, and the instant it passes the flexure it will enter the dilated cavity. If the sound be now carefully withdrawn, with the point pressed against the anterior wall, it will be felt to pass over a ridge or elevation at the seat of flexure in its exit, and the diagnosis is complete. The cervix may be either conical and pointed, or what Dr. Emmet calls "snout-shaped." The conical cervix is almost invariably found in connection with anteflexion, and for this reason the splitting it laterally, first recommended by Dr. Sims, and afterwards adopted by Dr. Barnes, of London, has been productive of but temporary benefit. Sometimes the cervix is so curved forward, that, in passing the sound, it is necessary to direct it for a short distance, with its concavity backwards, and then by rotating it the strictured part will be passed, and the cavity entered. In these cases the cervix is longer than natural, and the flexure is below the vaginal junction. Occasionally an actual stricture does exist at the seat of flexure, the result of adhesive inflammation, and it will require some nice manipulation to get the uterine probe through it without producing perforation; but except

actual adhesion has taken place between the opposite walls, with atrophy at the seat of flexure, the difficulty will with patience be surmounted. That atrophy of the neck, at the seat of flexure, as the result of long standing and acute anteflexion, *may* occur, is undoubted; but I believe it is unfrequent. More frequently the flexure is the seat of interstitial deposit and induration either in the front or back wall, or in both, and during its division is felt to "cry" under the knife.

Treatment.—It might be interesting to review in detail the different modes of treatment laid down by writers as most suitable for the cure or relief of this affection, were it only to show that the very divergence of opinions which obtains regarding it, but too clearly demonstrates how little understood is its true pathology. With many the uterus is considered the most helpless of all the organs in the human system, the most easily thrown out of its natural position by the most trifling causes, and incapable of being restored to its normal position, *and kept there* without mechanical support, which, alas! must be continued for a period so indefinite that no limit can be put to its duration.

The results have not been encouraging; for the attempt to straighten the canal and elevate the organ by the introduction of stem pessaries, has not only failed in accomplishing the object, but has frequently resulted in the production of pelvic inflammation or perforation, which have necessitated their withdrawal, and in some instances have proved fatal; while a moment's reflection on the position assumed by the distorted organ will convince us that no modification of the "horse-shoe," or circular pessary, can effect its replacement. But even were it possible to effect this object by mechanical contrivances, we should be but treating the "epiphenomena" of the disease instead of the disease itself. From the fact that in many cases the os is very contracted, and in all a tightness exists at the seat of flexure, others have looked on the condition as one of *stricture*, and have attempted to overcome it by gradual dilatation of the canal by means of bougies, but the attempt has not been successful, and simple as the procedure appears, it is not devoid of risk, for it not unfrequently causes metritis or pelvic cellulitis, and I have known this to occur in a patient treated by Dr. Meigs, who was himself an advocate of the practice. Sir James Simpson, of Edinburgh, was, I believe, the first to introduce surgical interference, by the introduction of his uterotome within the cavity, and a free division of the strictured part during its withdrawal; but several well-attested cases of death from hemorrhage, and the merely temporary relief afforded, have brought discredit on the practice. Dr. Marion Sims has modified the practice by dividing the posterior lip of the os in some instances, and in others by slitting the cervix laterally, but in neither case has the relief been more than temporary. To Dr. Emmet, Surgeon of the New York Woman's Hospital, is due the signal merit of instituting a treatment which amply meets all the requirements of the case, for it combines not only a surgical procedure, which is calculated at once to remedy the curvature, but a subsequent medication for the removal of existing disease, without which the former would prove unproductive of permanent benefit. Dr. Emmet has published an able monograph on the subject, which, if it were more generally known to the profession, would render this article unnecessary; and were it not that recent discussions in the medical societies of Europe and elsewhere betray a total ignorance of the views he entertains and the practices he inculcates, it would not have been written. It is above all things necessary to recognize the fact that textural disease not only accompanies, but *precedes* the misplacement, and that our endeavor must be directed not merely to the removal of the curvature which so seriously interferes with the proper circulation of the organ, and is a mechanical cause of the dysmenorrhea and sterility attending it, but the restoration by proper therapeutical remedies of the organ itself.

I shall now attempt to describe in substance, but not in his words, Dr. Emmet's operation for anteflexion, and the subsequent treatment. The wood-cuts now shown represent an anteflexed uterus with a conical cervix, such as is frequently met with, and with the cavity enlarged in consequence of retained secretions.

Fig. 1,

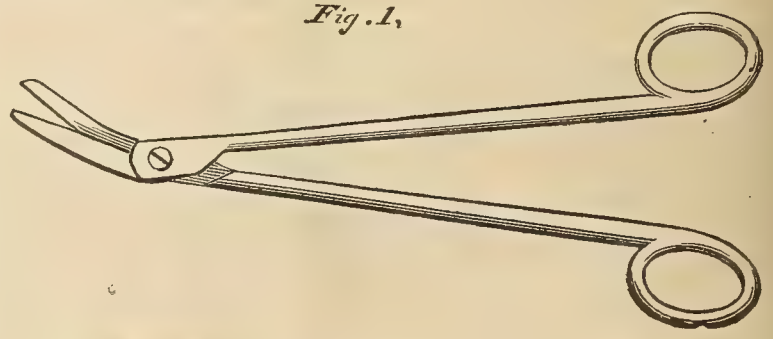
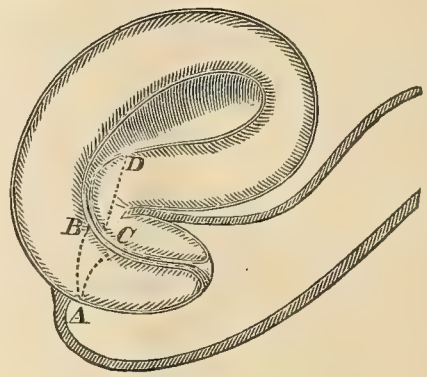


Fig. 2,

Fig. 3,



The instruments required for the operation are: A long elbow scissors, Fig. 1; a knife, Fig. 2, Fig. 3, with a small movable blade, moving in a "ball and socket" joint, which allows of its being fixed at any required angle; a tenaculum, half a dozen sponge probangs, and a long uterine dressing forceps. The knife is a modification of that invented by Dr. Sims, and is simply invaluable in uterine surgery. The blade is somewhat cimeter-shaped, narrow, blunt at the extremity, to allow of its easy introduction, and from 1½ to 1⅝ inches long; the knife, with the handle, being 10½ inches long, and the scissors are about the same length. A table some 2 feet wide, 2½ feet high, and about 4 feet long, covered with a folded quilt or blanket, should be used instead of a bed, for this and all other operations on the uterus. A bed is too yielding and too low, and does not allow of the operator sitting, with all his appliances beside him, and unembarrassed, as is the case when a table is used. The proper time for the operation is after the cessation of the catamenia; and the patient having had the bowels freely evacuated the day before, is placed on the left side in the position previously described, the right leg being drawn up a little higher than the left. Sims' speculum hav-

ing been introduced, the perineum should be well retracted, and the anterior lip of the os seized by the tenaculum, and held steadily in position. The elbow-shaped scissors are now introduced, with the convexity towards the sacrum, and one blade having been passed within the os, the posterior lip is divided by a single stroke. The dotted line between A and C represents the incision made by the scissors.

The uterine probe, properly curved, is then passed to the fundus, and held by an assistant, and the knife, adjusted as in figure 3, with the cutting edge *backwards*, is introduced alongside the probe, so as to divide the triangular space, A, B, C, formed by the inner blade of the scissors moving in an arc of a circle. The probe is still retained *in situ* and the *blade having been reversed* (with the cutting edge *forward*), is again introduced, cutting the constricted point from C to D, and enlarging the passage, if necessary, as it is withdrawn. This is Dr. Emmet's operation. In making the first incision with the knife, I am in the habit of passing the blade well up above the flexure, opposite D, as I have found it of the utmost advantage to incise the sometimes indurated, and almost always hypertrophied back wall of the cervix. In making the ront incision, it is of importance to draw the neck forward with the tenaculum, and to steady it during the operation, and on its completion the free movement of the sound backward and forward will demonstrate its success.

Unlike the operation for retroflexion previously described, the occurrence of hemorrhage, not so much during, as *after*, the operation, is *always* to be apprehended, except due precaution is taken to prevent it; and it is noticeable that the bleeding almost invariably proceeds from the incision in the anterior wall, doubtless owing to a hyperemic condition of the structure at the seat of flexion, or a wound of the circular artery, lying close to it. A free bleeding during the operation should be allowed to take place, as a beneficial depletion of the diseased organ, but should not be allowed to exceed two or three ounces before the proper dressing is applied. A narrow strip of lint, first moistened, is dipped in a saturated solution of perchloride of iron in glycerine, and held by the end in a pair of long dressing forceps, the vagina is then freed from blood, a sponge probang is applied to the os, and immediately upon its withdrawal, the lint is pushed up between the lips of the incision, and properly packed within the os. A small tampon of cotton dipped in the same solution, is then applied *against* the os, and behind this two or more tampons of *dry* cotton, with strings attached to them for withdrawal, will complete the dressing and render a hemorrhage simply impossible. Dr. Emmet contents himself with the introduction of a portion of lint saturated with glycerine, within the incision, over this a pledget wet with solution of alum, and finally he tampons the vagina thoroughly with *damp* cotton. I think my plan of dressing greatly preferable, for the perfect security it affords against hemorrhage, and the beneficial effect of the styptic in preventing premature adhesion of the cut surfaces. The patient should be lifted into bed and kept there for at least fourteen days. After some eight or ten hours the outer tampon may be removed, and the next day the second one. On the third day the inner tampon (which has been placed against the os) will be found loose, and should be taken away; but the strip of lint between the cut surfaces must be allowed to remain till it becomes free and is thrown out, which will occur on the fifth or sixth day from the operation. The vagina must be syringed twice a day with warm water, and the sound should be passed through the line of incision to prevent closure by granulation. Great caution and tenderness should be exercised in passing the sound on the fifth or sixth day after the operation, or hemorrhage will be provoked. But after a day or two, firm pressure should be used in drawing its point through the incision in front, and pressing it firmly backward on the posterior one, and this should be done at first *every* day, and then on every *second day, till the next catamenial period.* The canal being patent, it will also be found advantageous to inject occasionally a small quantity of carbolic acid and glycerine, in the proportion of one to eight. On the cessation of the next menstrual discharge, the medication of the interior of the uterus commences, and it may here be emphatically stated that without it the previous operation is productive of only temporary benefit. Chronic endometritis with follicular disease is almost invariably present, and their complete removal is essential to recovery. Dr. Emmet speaks most highly of chromic acid (in a solution of water of equal parts), applied once or twice a month, to the entire uterine canal. This is applied on a bit of cotton twisted around a thin, flat silver probe, properly curved, and dipped in the solution *to saturation*, but no more, and in making the application the uterus should be steadied by seizing the cervix with the tenaculum. So long as any discharge (not the result of treatment) continues, the applications are to be repeated after each menstrual period, and in the intervals Churchill's solution of iodine may be used. In his hands this treatment has proved very efficacious, but it has occasionally failed in mine, in entirely eradicating the disease, and I think I can point out the reason. No matter how adroitly or how quickly the probe is passed into the cavity of the uterus, its passage through the canal of the cervix permits but little of the acid reaching the upper portion of the cavity, where the affection first originates, and to which it obstinately clings after the canal appears to have become quite healthy. Chromic acid, in any form of dilution, cannot with safety be injected, and nitrate of silver or sulphate of copper in stick are both painful and disappointing in results. Sponge tents exert by their pressure the most beneficial effects on the supersensitive mucous lining, and stimulate the absorption of enlarged follicles, and, followed by injections, meet all the requirements of the case. After a menstrual period a sponge tent is introduced, and on its withdrawal, twenty-four hours afterwards, about a drachm of pure tincture of iodine is injected through a long, hard rubber tube, properly curved, to which a hyperdermic syringe is attached; but better still, a solution consisting of carbolic acid one part, glycerine three parts, tincture of iodine four parts—and this latter is so admirable and permanent in its results that I seldom use any other. At the expiration of ten or twelve days this application may be repeated, but never oftener than twice in the month, and not later than within a week of the period. This treatment continued for two, three or four months, according to the exigencies of the case, will effect a perfect cure.

If the precaution is taken of dilating the canal properly, no risk and but scarcely any pain attend the injection; and, indeed, *all* pain may be avoided by simply warming the fluid before injecting it.

It has been the habit, of late, to decry all surgical interference with the uterus, in the treatment of such affections, as productive of mutilation and permanent injury to the organ, and it has been asserted that milder means are equally efficacious. That the latter statement is devoid of truth, it is only necessary to point to the numberless cases in which treatment by dilatation, the introduction of pessaries, or the administration of medicines, has utterly failed. And as to the former, I utterly deny the charge. In the hands of an ignorant or inexperienced man the simplest operation in surgery may be productive of the utmost peril, and it cannot be denied that in the operation now detailed great injury may be inflicted by a

want of caution or knowledge on the part of the operator, but such an argument is too futile to require refutation.

During the last two years I have performed the operation in fifty-five cases, in private and hospital practice, without a single casualty beyond that of a free bleeding, in some of the earlier cases; and I can honestly affirm that it has been attended with such a gratifying success as fully entitles it to the position claimed for it by its distinguished originator.

I have said nothing of the constitutional treatment hitherto, but it is a matter of considerable importance. The diet must be regulated, and the state of the secretions attended to. In many cases a passive congestion of the liver exists, in conjunction with derangement of their portal circulation and hemorrhoidal affections. Small doses of the bichloride of mercury, with vegetable tonics, and occasional free purgation, are very necessary during the first six weeks of the treatment, and where the system has been enfeebled, cod liver oil, with wine and iron, or the hypophosphates, will be of eminent service during convalescence.

The first two cases are selected from their exceptional severity:

Case 1.—Mrs. ———, a widow lady, aged 39; seen 23d January, 1867.

History.—Married seven years; husband died a year ago; no children; menstruated at sixteen; health tolerably good till some time after marriage, when a miscarriage took place at four months; hemorrhage severe and prolonged, but was arrested by cold applications; suppression of the catamenia, followed by severe pain in hypogastrium, took place, and has never been well since. For the last three years has been extremely ill and incapable of taking any physical exertion without great suffering. Menstruation painful and prolonged, but scanty. Walks in a stooping position, and complains of constant irritability of the bladder, which obliges her to micturate every twenty minutes, day and night. The sense of pain and distress is so constant, that she describes it as present even during the short snatches of sleep she is able to obtain, and declares life is a perfect burden to her. Cannot walk without the support of an abdominal bandage, as she feels as if the contents of the pelvis were falling out.

Complexion sallow and unhealthy; urine generally normal, but occasionally clouded with mucus; suffers frequently from low fever of an intermittent character. Has been for a length of time under treatment, and was finally told that she had *cancer*, and her case was incurable. On *examination* the uterus was found acutely anteflexed, the fundus lying on the bladder; cervix conical and directed backwards; pain on pressing the anterior wall of the cervix, and induration at the seat of flexure; os small, and considerable difficulty experienced in passing the small sound; cavity of uterus dilated; depth of canal three inches.

Treatment.—The operation for anteflexion, previously described, was performed; free bleeding took place at the time, and was followed by signal relief to all the symptoms. The sound was passed frequently, and after the next menstrual period had ceased, a sponge tent was passed, and tincture of iodine injected.

It is unnecessary to enter into further details of the treatment previously described, more than to say that the vesical irritation gradually subsided, and by the end of three months the patient was almost well. Unfortunately she was obliged at this time to go up country on business, and during her absence caught severe cold, and was exposed to malarious influence. On her return, she was suffering under low intermittent fever and *acute cystitis*. It was several weeks before the fever was subdued, but the cystitis remained, and was the cause of the greatest imaginable suffering, which for a length of time withstood all my efforts at relief. Large emollient injections into the bladder afforded temporary relief, but the incessant desire to micturate deprived the patient of all sleep and comfort. Having injected a weak solution of tincture of iodine in water with temporary relief, I determined on injecting permanganate of potash, in the proportion of 10 grains to the ounce, while under chloroform, and the effect was magical. A second injection was completely curative, and from that time the amendment was steady, and resulted in complete recovery. The treatment extended over a period of six months, but resulted in the attainment of perfect health. I saw the patient last month, and she assures me she never felt better in all her life, and what is noticeable, she never suffers from intermittent fever, to which she was for years a victim.

The next case was also of an aggravated character:

Case 2.—Mrs. ———, aged 28; seen 23d May, 1867.

History.—Menstruated at fifteen; suffered from dysmenorrhea up to her marriage at seventeen, which was greatly aggravated afterwards; conceived about a year after marriage, and miscarried six months afterwards; has never had a day's health since. First husband died two years after marriage; married again a year ago; during the last ten years has spent half the time in bed from the illness occasioned by the slightest physical exertion; menstruation exceedingly painful, and for several days before and after its appearance obliged to keep to her bed; discharge scanty; leucorrhea in the intervals; constant pain in the back, and incessant desire to micturate, with great pain; urine loaded, and passed in small quantities; bowels obstinately constipated, and the passage of a motion attended with such suffering that she is frequently obliged to forego the desire to evacuate them—prolapsus ani. On *examination* the uterus was found anteflexed, and lying on the bladder; cervix conical; os very small; vagina intensely congested and contracted; orifice of urethra red and irritable-looking; bladder contracted, and great pain felt on passing the sound along the urethra; flexure existed at the vaginal junction, and acute pain felt on pressing the anterior wall of cervix; sphincter ani spasmodically contracted, and within the sphincter some small ulcers and a fissure existing.

Treatment.—The cervix was divided posteriorly with the scissors, and the knife passed through the flexure in front. Subsequently the sound was regularly passed to prevent adhesion. After the next catamenial period sponge tents were introduced, followed by tincture of iodine; chromic acid was also applied occasionally on a bent probe, covered with cotton. Afterwards carbolic acid, with glycerine and iodine, in the proportions previously stated, were injected after dilatation. The patient having to a great extent regained health and strength, I divided the sphincter ani with the knife, and for a length of time prevented any action of the bowels except by injections; this effectually removed the bowel affection, but chronic cystitis still remained. A solution of the tincture of muriate of iron in water was at length successful in removing this, and the patient made an excellent recovery; at this date she is in excellent health. Owing to the complications the treatment extended over a period of five months.

Case 3.—Mrs. ———, aged 25; first seen 8th May, 1868.

History.—Married two years ago; conceived shortly after marriage, and procured abortion three months afterwards; complains of pain in back, and leucorrhea with irritation of bladder; dysmenorrhea *most severe;* discharge scanty; is thin, and suffers from general ill-health.

On *examination* the uterus was found anteflexed and hypertro-

phied. The lips of the os were spread out "snout-shaped," as described by Dr. Emmet. The operation for anteflexion was performed, followed by a sharp bleeding, which, however, was easily restrained. The subsequent treatment was such as has been described, and by the end of three and a half months the uterus had attained its normal position; all vesical irritation had disappeared; the catamenial discharge had become free and painless, and the patient had attained the enjoyment of perfect health. At the present moment she remains perfectly well.

Case 4.—Miss ——, aged 19; first seen 15th July, 1868.

History.—Menstruated at fourteen; subject to frequent attacks of ill-health; spinal irritation being very marked; was treated in Germany for spinal disease, and had slight lateral curvature. Had from the commencement suffered from dysmenorrhea, which for the last two years was so severe that for forty-eight hours before the appearance of the catamenia patient screamed with agony, and often rolled on the floor during her sufferings. During the interval had profuse leucorrhea, with vesical irritation. Complains of constant pain over the sacral and dorsal regions; pain radiates from the lower dorsal region around the epigastrium. Is well nourished, but incapable of much exertion; temper very irritable; catamenia scanty, excessively painful and prolonged, with frequent discharge of small clots.

On *examination* the uterus was found acutely anteflexed—os-shaped, like Case 3; great difficulty in getting the small sound through the flexure, which was strictured, but still pervious.

The operation for anteflexion was performed, and followed by the treatment previously detailed, and in four months the patient had regained perfect health, while the uterus was at the same time restored to its natural position, and the canal had become pervious throughout. I found the administration of cod liver oil with Port wine and steel with muriate of ammonia and tincture of mix. vomica, of infinite use during convalescence, and under their use all symptoms of spinal irritation disappeared. She is now hale and healthy; the menstrual discharge is normal in quantity and painless, and she considers herself quite independent of the doctors.

The above are only a few out of a large record of successful cases, but sufficiently illustrative of the disease and its treatment.

One word about congenital anteflexion, and I have done.

In these cases the uterus is frequently found undeveloped, with a canal of only one and a half to two inches deep. The operation described above is suitable, but the flexure and disease having been removed, an important indication remains, namely, the development of the infantile uterus—a state of things which is found in super-involution—and for this purpose I have found the introduction of small sponge tents, twice a week, most efficient. Under their influence the entire uterus seems to *grow*, and at this moment I have a case where a full inch has been gained, and the uterus is now perfectly normal in size and position.

A CLERICAL SURGEON.

Father Heylen, a Catholic priest of Boom, in Belgium, performed the Cæsarian operation on a young woman in order to baptize the infant before it died. The mother appears to have been living when the operation was commenced, but both mother and child succumbed. In his defense the priest said that he performed the operation in obedience to the direct instructions of the archbishop. These instructions are now to be canceled, and the clerical surgeon tried for murder.—*Med. and Surg. Reporter.*

California Medical Gazette.

SAN FRANCISCO, MARCH, 1869.

☞ *All letters and communications to be addressed to the* "Editor California Medical Gazette," care of A. Roman & Co., San Francisco.

San Francisco, January 20, 1869.

Messrs. A. Roman & Co., San Francisco:

Gentlemen: The demands upon my time are so great and incessant that I find I am unable to give to the California Medical Gazette the attention and care it requires, and trust you will allow me to resign from the editorial charge. It will give me great pleasure, as my time permits, to continue the series of papers already commenced in the journal, and contribute in other ways whenever an opportunity presents itself.

I am, Gentlemen, very respectfully,

Your obedient servant,

J. CAMPBELL SHORB.

[The above speaks for itself. All we have to say is, that we are extremely sorry to lose the companionship and valuable aid that Dr. Shorb has given to the Gazette, and we trust our readers will not feel his loss as we shall.

The getting up of a monthly medical journal is a serious business, when added to professional engagements that daily leave no spare half-hour; but with us the extra work is a labor of love, and as our heart is in it, we mean to keep our head and our hands in it also, trusting to work out the aim which actuated us in our commencement—namely, that of making the California Medical Gazette useful to our brethren, and as good a medical journal as exists in the country.

Dr. McNutt will succeed Dr. Shorb. He is already known to our readers from several papers which have been published in the Gazette, and which have been copied in many periodicals throughout this country and Canada.]

SALUTATORY.

In accepting the position as president of a society, chairman of a meeting on some grand occasion, or editor of a journal, one is supposed to be overwhelmed with doubts and fears in regard to his ability to discharge such arduous or honorable or responsible duties as may fall upon his modest head. Such persons, on such occasions, have always elicited our keenest commiserations.

Therefore, in assuming a small share of the editorial labors of this Gazette, we feel that we have a claim upon the sympathies of its friends and readers. But instead of urging our claim on this occasion, we much prefer the still more modest course, viz.: that the editor shall be held responsible for our short-comings, and for the Gazette's occasionally not coming.

This we ask upon the ground of the editor's having solicited our assistance, and from the fact that he is to lose in a great measure the valuable assistance of our predecessor, Dr. Shorb.

We will promise, however, that any failure on our part will not be owing to lack of zeal. Our earnest endeavor will be to make the California Medical Gazette welcome and useful to the profession on this coast, not only by keeping pace with the advancement of the science, but by cheerfully co-operating with the liberal and progressive, and by cordially uniting with those who believe that harmony in the Faculty is a professional virtue.

W. F. McNUTT.

THE SMALL-POX.

The small-pox, which has been scourging us so severely for the past seven months—which has claimed its holocaust of 500 martyrs—is now weekly diminishing the number of its victims. The fuel being exhausted, the fire goes out. The lesson has been a severe one, but, as we have before observed, it will enshrine a blessing, if we profit by its teaching; and to do so we must all lay aside our own self-sufficiency, and profit by the experience of others.

Before Jenner made his immortal discovery, in the words of the eloquent historian, Macaulay, "The small-pox was always present, filling the churchyards with corpses, leaving on those whose lives it spared the hideous traces of its power, turning the babe into a changeling at which the mother shuddered, and making the eyes and cheeks of the betrothed maiden objects of horror to her lover." Out of every million people, three thousand died yearly from this disease alone. After Jenner's discovery had been promulgated, and the practice of vaccination was universally and efficiently performed, the death rate in European countries fell to ten per cent., or less, and for some years the annual rate per million of the population from small-pox was from 200 to 300 only.

A recent English reviewer says: "At, and for a certain period after the time of Jenner, the practice of vaccination was much in the hands of men who had been taught by him, either orally or in his writings, and who thoroughly understood the work they had to do. But as the practice became more general, the conditions of its success were to some extent lost sight of. The writings of Jenner were found only in the hands of the curious in medical literature. Medical education was controlled by the so-called 'pure' physicians and surgeons, who did not vaccinate themselves, and did teach vaccination to students. The apparently trivial character of the operation led to a low estimate of its actual importance; a small fee was charged for it, or sometimes no fee at all; and it was often left to an apprentice or to an unqualified assistant. Hence it befell, that in course of time the actual efficiency of the vaccination done in this country greatly declined; and partly in consequence of the change, the practice of vaccination lost ground in the estimation of the public."

During our present epidemic a great deal of nonsense has been talked and written about persons taking the small-pox who had just been previously vaccinated. Vaccination, properly and efficiently performed, offers the same immunity from an attack of small-pox as an attack of small-pox itself would. This is a well-established fact. A person *may* have an attack of small-pox a second time, but the chances are so remote as not to be worth consideration. Vaccination, improperly or inefficiently performed, with an old dry, effete crust, will only afford an incomplete, temporary, or perhaps no protection whatever.

True and efficient vaccination can only be performed with fresh lymph—that is, from arm to arm, the vesicle being a week old.

Dr. Marson, the resident medical officer of the London small-pox hospital, is of opinion that four fully formed and distinct vaccine vesicles are required, in order to afford complete protection for the *whole of life;* and he infers that a diminution in the number of perfect vesicles affects the *duration* of the security rather than its degree, while it lasts.

But the medical opinion, or the fact which we wish to bring before our readers, and it may explain the supposed anomalies of people taking the disease after vaccination, is this: That a vaccination in any way imperfect or irregular, although it may afford a limited or partial protection, may often so far modify or disturb the system that a subsequent vaccination, however efficiently performed, will not afford complete protection. Thus, a child imperfectly vaccinated with, say, only one vesicle, may be perfectly protected for a time—may be found to resist revaccination after an uncertain period—and yet, may at any time afterwards take the small-pox.

We have the small-pox carrying off its hundreds now, and shall have it again and again unless we follow the example of other countries and make proper and efficient vaccination *compulsory*. The plan and details are very simple and feasible, and we shall be only too happy to offer practical suggestions to any member of our delegation who may deem the subject of sufficient importance to bring it before our next Legislature.

Total Number of Deaths in San Francisco during the year 1868: Jan., 228; Feb., 209; March, 195; April, 193; May, 218; June, 275; July, 346; Aug., 317; Sept., 350; Oct., 334; Nov., 411; Dec., 501. Total, 3,657. For Jan., 1866, there were 226; Jan., 1867, 222.

NOTES OF THE MONTH.

SCARLATINA.

We have had during the month some very fearful cases of scarlatina. Children have been cut off in a few hours from the intensity of the blood poisoning—the symptoms being vomiting, purging, and collapse, without, or with only a partial appearance of the eruption.

As a zymotic disease, we believe scarlatina to be, to a certain extent, preventible. For seven or eight years, it was a disease unknown to us in San Francisco; but with the growth of the city and the neglect of proper sewerage, it has at times become a fearful mortality. Mr. Simon has shown, that it belongs as much as typhoid to the sewer group, as severe sore throats with fever are the common result of inhaling sewer vapor.

The epidemic that we now have is but a repetition of its true history. Some cases are so mild that the child hardly ceases to play; others are pathognomonic, with or without sequelæ, and so on up to the malignant cases we have mentioned. The moral is easy: Cleanse our dirty streets; do not leave the offensive and pestilent mud from the trap-holes at the street corners for a week, and do take proper means to flush out our imperfect sewers. We have plenty of "red tape" and "circumlocution;" we want a Cromwell to order the "BAUBLES" to be taken away.

THE SMALL-POX HOSPITAL.

Drs. John F. Morse, Jos. Haine, and Henry Gibbons were a Committee appointed by the San Francisco Medical Society to visit and inspect the condition of the Small-Pox Hospital.

Their report is, on the whole, very satisfactory. They found the house clean and well ventilated, the beds and bedding very clean, the food good, and the patients satisfied with the care taken of them. They approved of the location of the Hospital, its isolation, and the pure air which surrounded it. They complained of "the terribly crowded condition of the wards—cots so close together, that there was hardly room for a chair between them." This defect, however, is being remedied by the erection of an additional wing. We are sure every one will be gratified with this report, emanating as it does from such reliable authority.

For the sake of medical literature, we are sorry we cannot allow a grammatical blunder to pass unnoticed—one very common in the reports of Grand Juries and others, who begin in the third person and drop off in the same sentence to the first.

Our medical reporters say: "The undersigned visited and inspected the Small-Pox Hospital, and submit *their* report, etc. *We* went through and carefully inspected," etc.

Custom and continental liberty—"RIGHTS" and republicanism—may spurn the usages of polite literature, and soar above the trammels of aristocratic grammar; but members of a *learned* profession should respect its hoary amenities.

MARINE HOSPITAL.

We copy the following excellent item from the report of the last Grand Jury:

> The temporary Marine Hospital is too far away from the shipping, difficult of access, and is not a suitable building for hospital purposes. The contract system is in every sense objectionable, but no complaint of inefficiency is made against the physician in charge, who, the Examining Committee believe, has faithfully discharged his duties. It is hoped that steps will be taken at an early day for the erection of a Marine Hospital that shall be entirely suitable for the wants of this coast, and one of the islands in the harbor is regarded as a proper place for its location.

CONVICTION OF AN ABORTIONIST.

About a year ago, an irregular practitioner, who calls himself Dr. J. H. Josselyn, was arrested on the charge of procuring a criminal abortion upon the person of a young orphan girl named Elizabeth Lock. We are glad to notice that, at his trial on the 15th of January last, before Judge McKinstry, in the County Court, Josselyn was found guilty of the crime as charged in the indictment.

The course usually pursued by the profession, of treating the assaults of their enemies only with silent contempt, is eminently a proper one under most circumstances, and befitting their dignity. But there are circumstances under which silence gives encouragement to pernicious and criminal practices; and, although the misdeeds of unprincipled men belonging, or claiming to belong to the profession, cannot in any way affect the individual standing and reputation of respectable practitioners, yet they may sometimes bring odium upon the profession as a class. And it is in cases where such a result is likely to obtain, that it becomes proper to enlighten the community at large as to what are the rules of conduct that govern the legitimate profession. In this matter of criminal abortions, it is beyond question that the idea prevails in some classes of society, that physicians themselves consider the crime as one of little magnitude, especially if committed during the early stages of gestation. To permit such a supposition to exist, unexplained and uncorrected, is practically equivalent to an encouragement of the spread of the criminal practice. There are those who do not know, and should be told,

that every intelligent and respectable physician looks upon the crime of willful destruction of the human fœtus, at any stage of gestation, as nothing short of murder; and that he is bound, not only by his professional honor and those moral and religious principles which would prevent him from committing murder under any circumstances, but also by his oath, and by every code of ethics which he subscribes to or recognizes, to abstain from all practices likely to result in the destruction of fœtal life.

Knowing this, the members of society are capable of judging intelligently the conduct of persons styling themselves physicians, who shall countenance or practice the crime of abortion. It becomes simply a question of the standing and the intelligence of the guilty parties, and there will be no longer any fear that their views or acts may bring odium upon the legitimate profession as a body.

REPORTS OF SOCIETIES.

MEETING OF THE SAN FRANCISCO MEDICAL SOCIETY, JAN. 26, 1869.

After reading of the minutes of the last meeting by the Secretary, Dr. Gibbons, Jr., the President, Dr. Whitney, vacated the chair in favor of his successor, Dr. Morse, who was elected President, at a previous meeting, for the ensuing year. Dr. Whitney thanked the members for the honor they had conferred upon him, by electing him to so honorable a position, and also for the valuable assistance they had rendered him in discharging his duties, and especially thanked the Secretary, Dr. Gibbons, for the correct and elaborate manner in which he had noted the proceedings of the Society.

Dr. Morse, in taking the chair, said that he was overwhelmed with fears as to his ability to satisfactorily fill a position so honorable and responsible, but added that he would endeavor to discharge his duties promptly and faithfully.

Dr. Morse, as chairman of a Committee to visit the Small-Pox Hospital, then read their report:

The committee thought the location admirably chosen; that the building might answer the purpose as a temporary affair, and that the inside presented a much better appearance than the outside; that the food was good and well prepared; that the attention to patients seemed to be all that was desirable, and that too much could not be said in praise of the kindness and devotion of the Sisters; that no hospital could be kept more free from disagreeable odors.

Dr. Morse remarked that he had, while there, an opportunity of witnessing an autopsy, and that he could not see any evidence of pustules on the brain or pustules or ulcer on the membranes, such as the city medical officer is said to have observed on the brain or membranes from those dying of small-pox, but that from the indurated condition of the brain, he immediately recognized that the subject had been, during life, immoderately addicted to the use of alcoholic liquors.

We would call the attention of the profession to this remark, as we were not aware ourselves that the immoderate use of alcohol would necessarily produce hardening of the brain. And more especially as no teacher of pathology, either in this country or Europe, had ever, to our recollection, exhibited to us an indurated brain as the result of alcoholic drink; while we have not unfrequently seen softening of the brain attributed to intemperate habits.

Dr. Haine exhibited to the Society a bone about the size of a large bean, which he said a patient of his had coughed up, and which he believed to have been lodged in the right bronchial tube for six weeks. It had produced some inflammation and spasmodic coughing.

CALIFORNIA ACADEMY OF SCIENCES.

The Academy met at their rooms Monday, February 1st, at 8 P.M.—Col. Ransom in the chair. Eighteen gentlemen were elected members. Mr. T. A. Mudge presented to the Academy several specimens of petrified wood from a mine near Grass Valley; also, a suit of armor worn by the natives of Alaska before the immigration of the Russians.

Mr. H. G. Hanks read a very interesting paper on the mineral resources of Southern California. He exhibited a few very rich specimens (of which he has a large collection). Some of these specimens were presented as assaying equal to the White Pine mines.

The report referred more especially to the Inyo District, Death Valley, and particularly to the Gunsight lead, the first silver lode found in California of which any record exists. He stated that an immigrant party in 1849 came in and reported having seen fabulously rich silver mines on their way, and brought in specimens of pure silver. In 1850, Dr. French at the head of a party went out to hunt for it, but unsuccessfully, and it has existed in story ever since. The finest specimens exhibited by Mr. Hanks were of argentiferous galena, tetrahedride, kerargyrite, stromeyerite and molybdate of lead. There was also a large and rich specimen of partrite. These specimens are all rich in silver and gold. There are also many remarkably fine specimens from the unexplored regions east of the Sierra. Some from the Montgomery District, at the northern end of Owens River, are fahl ores and antimonial and chloride of silver, and show an abundance of the free metal. Mr. Hanks has shown by these specimens that an immensely rich mining coun-

try remains yet to be explored and open to American adventurers.

At a regular meeting of the Academy held on February 21st, the following were elected members: J. W. Hobson, John J. Stephenson, M.D., and Smythe Clark; and proposed for membership, Dr. George Hewston, Mr. —— Easton, Dr. Aronstein, and James F. Breed.

Dr. Blake read an interesting paper on Amœbæ and the lower forms of organized matter. He stated that he did not intend to enter into any scientific investigation of the subject; we were not yet in a position to discuss it in a purely naturalistic point of view. He spoke of the interest taken in the microscopic study of the lower forms of animal and vegetable life, or more properly speaking, of those forms in which our ordinary means of distinction between animal and vegetable life cease to be available.

As the revelations of the telescope have furnished to the astronomer a nebulous field on which the imagination may take an occasional canter, so had the microscope opened up to the naturalist a new order of beings. In the course of the lecture he pointed out the more striking peculiarities of the amœbæ, as regards their powers of organization, locomotion, nutrition and reproduction. The habits of this lowest order of what are by courtesy called living beings, but are, in reality, only small masses of glutinous matter, were fully described and illustrated by diagrams, showing their various stages of formation, their several varieties, and that they were found everywhere, even in the sands of our seashore, nearly a hundred feet beneath the surface. Although constituting the lowest form of animated beings, their habits were worthy of being studied. Sometimes five or six of these amœbæ join, and they can be divided indefinitely. They often fall into a hundred pieces, each piece being animated and becoming a distinct individual of his species. When the being, which has neither mouth nor stomach, required nourishment, it shut itself around the food instead of receiving it. The lecturer showed by diagrams the curious method by which the creature separates and re-forms into others of its species. They are neither animals nor vegetables, yet partake of the nature of both. They have a tendency to continual motion, and these algæ, infusoria amœbæ, etc., find oxygen necessary to their movements, which cease upon the introduction of electricity or hydrogen. Even these low forms of animated nature possess feeling and taste, and the doctor invested so humble a subject with the deepest interest.

A number of scientific works were donated to the Academy; specimens of calcareous sandstone were presented by Mr. Yale; fossils from a coal mine in Mount Diablo by Capt. John Eckley; and a quantity of alcohol for preserving specimens, by James Dows & Co. A specimen of crystalized quartz, containing gold, was exhibited by Mr. Yale.

Professor Kellogg presented specimens of the fruit, foliage and timber of the Golden-Decked Live Oak, or Cañon Live Oak (*Quercus Chrysolepis*) of the coast of California, procured by Geo. W. Dunn, a member of the Academy. This oak, Professor Kellogg said, was by some confounded with *Q. Wishizeni*, specimens of which were presented for comparison.—*Times.*

REPORT OF OPHTHALMIC CASES.

Treated in the City and County Hospital, San Francisco, during 1868.

By GEORGE H. POWERS, M.D.

There were in all 59 cases admitted for treatment, classified as follows:

Conjunctivitis	20	Cataract	1
Iritis	10	Traumatic Affections	5
Ulcer of Cornea	5	Amaurosis	1
Phlyctenular Ophthalmia	1	Choroiditis	1
Onyx	1	Rheumatic Sclerotitis	2
Leucoma	1	Occlusion of Pupil	1
Staphyloma	2	Glaucoma	1
Gonorrheal Ophthalmia	1	Separation of Retina	1
Diphtheria Conjunctivæ	1	Trichiasis	2
Diplopia	2		

The cases of conjunctivitis include many chronic cases, which were past cure by reason of long neglect or empirical treatment, and only admitted of palliative measures.

The operation for extraction of cataract by upward section of the cornea was performed with excellent success upon both eyes of the patient, a colored woman, and I met her on the street a few days since, finding her way with great apparent ease, *without spectacles.*

The case of glaucoma was an excellent test case, showing the great advantage to be sometimes gained by Von Graefe's operation in this affection.

The patient was a colored man, a native of the West Indies; he had no perception of light, and suffered excruciating pains in the eyeballs and orbital regions, which deprived him almost entirely of sleep. His pupils were very widely dilated and fixed, and the globes very tense; the ophthalmoscope showed, though not to a marked degree, the characteristic cupping of the optic disc. The operation, a broad indectomy, was done in both eyes, with the effect of removing at once the violence of the pains, which in a few days had entirely ceased. The patient had acquired also sufficient vision to distinguish the windows in the ward before he left the hospital.

The cases of diphtheritic and gonorrheal inflammation of the conjunctiva, both entered the ward after their diseases had made very considerable progress, it being already in one case the sixth, and in the other the fourth day. It was, therefore, an agreeable surprise to me that they both terminated without disas-

trous results, and these patients are now enjoying useful, though somewhat impaired vision.

The two cases of diplopia depended—one on impaired digestion, the other on cerebral trouble; the first was easily cured, the other made no improvement.

The case of separated retina was the most marked and characteristic specimen of this complaint I have ever seen.

The benefits of this branch of the hospital might be greatly extended by the creation of an ophthalmic clinique for out-patients, such as is now in successful operation in connection with the City Hospital in Boston.

REVIEWS.

Clinical Lectures on Diseases of the Liver, Jaundice and Abdominal Dropsy. By Charles Murchison, M.D., F.R.S., &c., &c. New York, Wm. Wood & Co.; San Francisco, A. Roman & Co.

In this concise and lucid treatise, the author informs us, it is not his object to "set forth a complete account of the diseases of which he treats, but rather to put prominently forward the leading characters on which the diagnosis of these diseases mainly depends, and in particular, to determine the diagnostic import of those signs and symptoms—such as enlargement of the liver, jaundice, dropsy, and pain, which are common to many different hepatic disorders, but the precise cause of which is too often unrecognized."

This object he has very successfully accomplished. Commencing with a description of the circumstances producing simulated hepatic enlargements, he classifies the diseases into such as are generally characterized by the absence of pain, and those in which pain is a prominent feature of the disease.

The clinical character of each disease, the symptoms that distinguish it from others, and those which arise from various complications, as well as the treatment, are very plainly and distinctly laid down; and each is illustrated by a variety of cases, which came under the author's own treatment in the Middlesea Hospital.

The chapter on Hydatid tumors is particularly interesting, illustrating the success of the author's method of evacuating the cyst by a fine trocar. Although this operation had been successfully performed many years ago, it is only recently that it has been commonly resorted to; but such has been the success, that in a tabular account of forty-six cases, given at page 118, we find only three that have terminated fatally, and in these death was inevitable under any circumstances.

The chapters on Jaundice occupy a large portion of the work, and contain a full and valuable exposition of the multifarious causes from which the disease originates, and the bearing such causes have upon the treatment to be adopted.

In regard to the execution of the work, the subjects are arranged with scientific precision, and the style is plain and perspicuous, never leaving us in doubt regarding the author's meaning.

The Opium Habit: With suggestions as to the remedy. New York, Harper & Brothers; San Francisco, A. Roman & Co.

It seems from the author, that there are from eighty to a hundred thousand persons in this country who are enthralled by the habit of opium. The victims are culled from all classes of society—from professional and literary men, down to fallen women; embracing those who suffer from protracted nervous disorders, and those who, from the war, have been left anguished and hopeless, or maimed, shattered and diseased.

The book opens with the author's recital of the successful attempt he personally made to overcome his daily practice of eating eighty grains of opium. His story is a very interesting one. Suffering from constitutional nervous sensibility, and a painfully disordered condition of the digestive organs, he was recommended to take opium. The palliative procured him ease by day and peace and rest by night. On omitting the remedy, his sufferings returned in increased severity. He fled back to his opium, and found delusive happiness in its painless but destructive haven. Its use thus became indispensable to him; but ashamed of being under its control, he tried to throw it off. His sufferings recurred in aggravated severity, and the opium was resumed in increased quantity. For fifteen years he was an opium eater, and consumed during this period more than half a hundred weight of opium—equivalent to more than a hogshead of laudanum. During these years repeated efforts were made to relinquish the use of the drug, but he broke down always in abortive attempts. "At length," he says, "a concurrence of favorable circumstances induced me to resolve upon a final effort to emancipate myself from the habit."

The plan proposed was to diminish the quantity daily. In a few days he descended from eighty grains to forty, with a good deal of suffering, but not positive agony. In a day or two more he was down to twenty-five grains; and now matters began to look serious. He felt stabbing pains beneath the shoulder blades, constriction of the stomach, perpetual restlessness, wandering pains over the whole body, irritability of mind, increased sensibility to cold, and an apparent prolongation of time, as if the day would never come to an end. The next day he dropped another five grains, making in a week a reduction of three-quarters of his daily allowance. From this point, until the opium was wholly abandoned—that is, in about a month—his condition was one of intolerable and unalleviated wretchedness, from intensely acute pain, and mental irritability and depression. He however fought bravely on, and his heroic courage brought him out conqueror.

The book then gives us long extracts from De Quincey, Coleridge, and others, on the misery and wretchedness produced by the habit, and finishes with two remarkably graceful and eloquent essays by Fitz Hugh Ludlow—one previously published in *Harper's Magazine*, entitled "What Shall They Do to be Saved," wherein is graphically described a case of opium eating, and the horrors and suffering produced thereby—and the other essay, the outlines of a plan for opium cure.

This book, although not strictly professional, is one of great interest to the physician. Although the subject is not new, it is extremely fascinating, and judging others by ourselves, when once taken in hand will not be laid down until finished.

The Medical Formulary: Being a collection of Prescriptions derived from the writings and practice of many of the most eminent physicians in America and Europe, &c., &c.; with an appendix, &c., &c., &c. By Benjamin Ellis, M.D., &c. Twelfth edition, carefully revised and much improved, &c., by Albert H. Smith, M.D., &c., &c.

This is a lovely book for the nostrum men—men who stop you in the street, and tell you they have a bad case of so and so, and ask you, what is *good* for it. There are a great many of this sort, and of which the twelve editions that this book has run through is an evidence. They are very *worthy* men, and very *respectable;* their black suit is spotless, and their demeanor is staid and decorous. We call to mind one of them, who, knowing that a grave case had got well under the care of a brother practitioner, went to the apothecary, who had

dispensed the prescriptions, and copied every one of them. This was one of the men who would delight in buying a Formulary like the present. We knew another, who handed the apothecary—a shrewd, clever fellow—a prescription calling for a round dozen of the most powerful drugs in the Pharmacopœia. The eye of the cunning apothecary looked at him with an inquiring smile. The grave M.D. replied that the case was a very complicated one, and he hoped "one of the remedies would HIT it." What a godsend such a Formulary as this would be to such a man. For the interest of our *craft*—but we question much, if for the interest of humanity—we recommend to such men this book. Here they will find a magazine of ready-made artillery, sure to *hit*—and perhaps to kill—and they may buy it either of Mr. Lea, in Philadelphia, or of Mr. Roman, in San Francisco.

Atlas of Venereal Diseases. By M. A. CULLERIER, Surgeon to the Hospital du Midi, etc. Translated from the French, with notes and additions, by Freeman J. Bumstead, M.D., Professor of Venereal Diseases in the College of Physicians and Surgeons, New York, etc. With one hundred and forty-five beautifully colored figures, on twenty-six plates. Philadelphia, Henry C. Lea; San Francisco, A. Roman & Co. 1868.

Dr. Bumstead has done good service in translating the *Precis Iconographique des Maladies Veneriennes* of M. Cullerier, and so faithfully reproducing in excellent chromos the valuable engravings of the original.

This is a work of master hands on both sides. M. Cullerier is scarcely second to, we think we may truly say is a peer of the illustrious and venerable Ricord, while in this country we do not hesitate to say that Dr. Bumstead, as an authority, is without a rival.

Cullerier's excellent illustrations of Venereal Diseases, full and complete as they are, fill a void in medical literature. Devergie's old work is out of print, and Ricord's is not up to the present day. Dr. Bumstead, in speaking of the value of these illustrations, truly says: "The exclusion of venereal diseases from most of our hospitals and dispensaries, and the little time that can be devoted by medical students to special branches, necessarily prevent the larger number from becoming acquainted with these diseases before graduation. Again, the physician engaged in general practice sees but few patients with venereal, and may find himself at fault when consulted in a case, the delicate nature of which forbids its being intrusted to another. A good illustration will materially aid a good description, and in itself is very much better than a poor one. A glance of the eye may revive memories nearly effaced, or convey knowledge not before possessed."

Agreeing fully with this, and assuring our readers that these illustrations tell the whole history of venereal disease, from its inception to its end, we do not know a single medical work, which for its kind is more *necessary* for them to have.

A Treatise on the Principles and Practice of Medicine: Designed for the use of Practitioners and Students of Medicine. By AUSTIN FLINT, M.D., Professor of the Principles and Practice of Medicine in the Bellevue Hospital Medical College, Fellow of the New York Academy of Medicine, &c. Third edition, thoroughly revised. Philadelphia, Henry C. Lea; San Francisco, A. Roman & Co. 1868.

Published in 1866, this valuable book of Professor Flint's has, in two years, exhausted two editions, and now we gladly announce a third. We say we gladly announce it, because we are proud of it as a national representative work of not only American, but of cosmopolitan medicine. In a brief notice like this, anything like a review would be a pretence; we only intend a notice. We therefore say, that if England may point with the finger of satisfied pride to the classical works of Watson, Aitkin and Tanner, we on this side of the Atlantic feel we can hold our own with this text-book of Flint. In it the practice of medicine is *young* and philosophical, based on reason and common sense, and as such, we hope it will lie at the right hand of every practitioner of this vast continent.

CURRENT LITERATURE OF THE MONTH.

THERAPEUTICS.

THE ADVANTAGE OF ADMINISTERING COLOCYNTH IN THE FORM OF TINCTURE.

By R. W. CRIGHTON, M.D. Edin., Leamington.

The value of colocynth in cases of habitual constipation, and likewise as a revulsant in head affection, has been long understood; but seems to have been not quite sufficiently appreciated in this country, from the drug having generally been used in the crude state.

The tincture, as employed in Prussia and admitted into the national Pharmacopœia, is a much more agreeable and convenient method of using it; the small dose required—ten to twenty minims—being easily combined in the same mixture with tincture of hyoscyamus, bromide of potassium, or other medicinal agents. Next to croton oil, it seems to have the greatest effect among purgatives in diminishing hyperæmia within the cranium; and, in cases of threatened or actual cerebral hemorrhage, its administration with tincture of hyoscyamus and bromide of potassium I have frequently seen attended with the best results. In habitual constipation, ten, or even five, minims in a little water an hour before breakfast, generally suffice to insure a full evacuation, without much inconvenience, or the dose requiring to be increased.

The introduction of this preparation into the British Pharmacopœia would, I am convinced, be useful in extending the agency of the drug in many cases of disease in which its action would be beneficial, but where at present it is but little employed.—*Brit. Med. Jour.*

POTASSÆ CHLORAS IN DYSENTERY.

At the Rudolf Hospital, Vienna, the above-named remedy has been used by enema in two cases of dysentery with excellent results—blood ceased to appear in the dejections after the first clysma. They used potass. chlor. scr. j ad aq. destil, dr. ij. *Wiener Med. Press*, No. 38, 1868.

CHLORATE OF POTASSA.

Dr. Simpson first suggested the use of chlorate of potassa as a preventative of abortion, on the ground that it would add oxygen to the system, for the restoration and arterialization of blood.

Fordyce Barker says: "Whether the theory be correct or not, the clinical fact of its value I am thoroughly convinced of." The administration of the medicine in those who have had habitual abortion, has been to increase the motions of the fœtus, and such remarked the feebleness or absence of motions when the medicine was suspended.—*Cincinnati Lancet and Observer.*

ARSENIC IN PHTHISIS.

The question of the therapeutical use of arsenic in phthisis is of much practical interest. It has been the subject of an able report by M. Hérard, of the Academy of Medicine of

Paris, in connection with a previous communication from M Moutard-Martin. M. Moutard-Martin, one of the nosocomial physicians of Paris, and an accomplished clinical observer, has studied with great care, and in a severely experimental manner, the physiological and therapeutical action of arsenic in phthisis. Two points of his researches have been to experimentalize with the remedy upon both hospital and private patients, and to exclude every other medicament from the treatment, so as better to distinguish the effects of the one under trial. According to M. Hérard, favorable effects are observed in the vast majority of cases. In the course of a few days only, the patient revives, the eye shows new life, the complexion is better, the appetite is restored, and the patient even gains flesh. The beneficial action of arsenic is, however, observed in only one class of phthisical sufferers,—those whose digestive organs have not undergone much impairment. In cases in which there is much impairment of the digestive functions, and in which vomiting and diarrhœa are already present, the remedy, far from doing any good, often increases this condition of the patient. This leads us to infer that arsenic exercises no local or direct action in phthisis, and that its good effects are merely due to its influence upon the functions of nutrition. M. Hérard, however, is inclined to believe that some direct action is exerted upon the mucous membrane of the lungs, which serves to eliminate the remedy ; and in connection therewith, he refers to the peasants of Lower Austria, of Styria, and of the Tyrol, who frequently make use of arsenic, because it enables them to breathe much more freely, when climbing up their mountains. With regard to the action of arsenic upon the functions of nutrition, M. Hérard thinks it is two-fold: not only does it increase the appetite, either by a direct stimulating influence on the mucous membrane of the alimentary canal, or by its general tonic and fortifying action, which the digestive organs would be the first to feel ; but it exercises another and most important influence, which consists in moderating the oxidation of tissues, and in thus impeding the process of denutrition, as has been shown by the experiments of Brettschneider, Schmidt, and Sturwage, and, still more recently, by M. Lolliot, House Surgeon to the Paris hospitals. This latter investigator has observed that the administration of arsenious acid, in doses of ten milligrammes daily, causes a lowering of the heat of the body, and a marked diminution in the quantity of urea. The form in which arsenic is administered preferably to all others, by MM. Moutard-Martin and Hérard, is the arsenious acid, prescribed in the shape of pills or granules, each containing one milligramme of the substance. Seven or eight of the granules are administered at first ; but he dose may be speedily carried to ten or fifteen milligrammes, very seldom to two centigrammes. M. Hérard asserts that with this precaution of dividing the daily dose, of never giving more than two millimetres at a time, and of administering the granules as often as possible immediately before the meals, no accident is ever seen to occur. It is very seldom that the treatment is suspended or modified through temporary sickness, vomiting, or diarrhea. When the granules cannot be administered, an arsenical solution may be employed in small and increasing doses ; and recourse may be had to arseniated mineral baths, such as Bourbole, the Mont Doré, etc. Whatever the form in which the remedy is exhibited, M. Hérard insists upon the necessity of suspending the treatment from time to time. In conclusion M. Hérard is confident that M. Moutard-Martin's researches have had the result of establishing the perfect innocuousness of arsenic when properly employed, and its undeniable efficacy in certain forms of tubercular phthisis.—*Lancet.*—[*Medical and Surgical Reporter.*

SURGERY.

CALCULUS IN THE BLADDER OF A FEMALE—RAPID DILATATION—REMOVAL OF NINE CALCULI—RECOVERY.

By Alfred Poland, F.R.C.S.

[From notes by Mr. C. Roberts.]

Elizabeth D., aged 57, admitted into Guy's Hospital, under the care of Mr. Poland, on August 26, 1868. The patient, who is a widow, and has borne several children, has had prolapsus uteri seven-and-twenty years. With the exception of the inconvenience arising from this cause, she enjoyed good health until ten years ago, when, whilst at work, she felt severe pain in the bladder, and on attempting to pass water experienced difficulty in doing so, the urine passing by drops, with a scalding sensation, and occasionally with sudden stoppage for a time. This pain and difficulty in micturition lasted for a week, when it ceased; but during the following six weeks difficulty occurred in micturition without any pain, and then the symptoms disappeared altogether. She is not aware of having passed any stone during this period. No recurrence of the symptoms took place until about three years since, when they returned with greater severity, occurring at intervals of a week or a fortnight; micturition was attended by severe pricking and shooting pains. For the last two years she has been obliged to pass water very frequently, and never without suffering much pain. During the past twelve months her urine has often passed involuntarily, chiefly during the night, but sometimes in the daytime. She states that her urine has frequently been thick and deposited a white sediment. She has latterly, at various times, passed small calculi of the size of a millet seed. She has resided at Brixton sixteen years.

On admission, the patient appeared in a very emaciated condition, suffering the most excruciating agony, so much so that her shrieks were almost unbearable by the patients in the ward. She passes her water about every hour, and generally in drops, and then with increased intensity of pain. By means of vaginal examination, a stone about one inch in diameter could be distinctly felt in the bladder, and on sounding the bladder several calculi were detected, as well as a large stone which could be readily detected, situated just beneath the pubes, apparently adherent to the anterior wall of the bladder ; and by further more accurate vaginal examination with the finger, the calculus could be felt between the finger and the anterior walls of the abdomen. This examination was conducted under chloroform. The uterus was prolapsed to the extent of two inches beyond the ostium vaginæ, and was returned during the above examination. The patient was kept under the influence of opium for a few days, and on August 31, five days after admission, Mr. Poland determined to remove the calculi. He stated that he should remove the calculi by rapid dilatation, and that, should the large calculus be fixed in the anterior wall of the bladder, he would extract it by the supra-pubic operation. Chloroform was duly administered, and the urethra then rapidly dilated by Weiss's instrument to the size of a man's thumb. Mr. Poland then removed several stones, varying in size from that of a pea to that of a filbert, by means of the forceps, having, at the same time, to return the prolapsed uterus, to facilitate the extraction. The large stone at the anterior part of the bladder, as anticipated, was found to be adherent, and this Mr. Poland, after some little trouble, was able to separate from its adhesions by means of the finger introduced through the urethra into the bladder. After several attempts with the scoop and the forceps, the stone was extracted, and it proved to be larger than was expected. After the operation an enema of starch and opium was administered, and the patient kept under the influ-

ence of opium to a moderate extent. The patient never had a bad symptom, and lost all her distress and pain ; the appetite returned ; sleep was a luxury of which she had been deprived to a great extent for a long time ; the urine at first passed away by dribbling, but soon the contractility of the urethra recovered itself, so that in the course of three weeks she was enabled to retain the urine for two hours at a time. She left the hospital shortly afterwards free from all symptoms, and with rapidly improving health and condition of body.

The calculi removed were nine in number, all exceedingly light, weighing only 596 grains, and consisted of the "fusible" variety. The eight smaller ones, weighing in the aggregate 236 grains, included five pyramidal-shaped stones, of a triangular form, having one side slightly curved, their bases being half an inch and their sides one inch in extent, and they seemed as if they were the component parts of a broken-up calculus ; but on section they proved to be distinct calculi, having each a distinct nucleus, and had derived their form from attrition. The large calculus weighed 360 grains, and measured five and a half by four and three-quarter inches in circumference, and one and a half by one and a half in diameter, and with the lithotomy forceps measured not quite two inches. Dr. Stevenson's report upon the nature of the calculus is the following : "The calculus dust consists of mixed phosphates—*i. e.*, of phosphate of lime, magnesia and soda, chiefly the two former—with a little animal matter. The calculus is a fusible calculus."

Remarks.—The above case will add another to the series of cases collected and published by Mr. Bryant in his very excellent paper in the forty-seventh volume of the *Medico-Chirurgical Transactions* for the year 1864, a paper well worthy the perusal of the operative surgeon. I quite coincide with his remark on vaginal lithotomy, that the latter operation is not "the only justifiable operation for stone in the female bladder." In our present case we had complications, one of which is by no means uncommon, viz.: prolapsus uteri. I feel sure that, in the exhausted and precarious state of the woman, had any operative measure other than the one adopted been employed, it would have resulted in a fatal termination. Had we not succeeded in extracting the stone by the urethra, we had determined to perform the supra-pubic operation in preference to all others.—*Med. Gaz. Lond.*

A CASE OF VARICOSE VEIN IN THE FEMORAL REGION SIMULATING FEMORAL HERNIA.

Letter from Gopaul Chunder Roy.

[To the Editor of the Medical Times and Gazette.]

Sir: Whilst visiting an outdoor Dispensary a patient was presented to me by the native doctor as a case of femoral hernia. The disease being of rare occurrence, I examined it with interest. There was a protuberant swelling over the right femoral ring about the size of a man's fist. The history of the case was as follows:

Sectaram, a Hindoo boy, aged 18 years, and a servant by occupation, stated that about three and a half years ago he observed a small swelling on the femoral region. It appeared spontaneously, and was not the result of straining, blow, or violent exercise. It has been increasing slowly, and has assumed at present the size of a man's fist, extending from the femoral ring upwards towards Poupart's ligament. The swelling becomes more protuberant whilst standing or walking, but disappears, or, as he says, goes in, whilst lying or pushed inwards. It has a soft elastic feel, and on manipulation subsides inwards, but is not entirely reducible. The portion left gives to the finger the exact feel of an intestine, without its gurgling sound or the impulse on coughing. It had never been painful or strangulated.

The history of the case, the site of the tumor, and the partial feel of it as above described, so exactly simulated a femoral hernia that it was not an easy task to distinguish the difference. I have on some occasions before noticed instances of inflamed tumors on the inguinal region mistaken for strangulated hernia, and even operated on for relief, when on opening the sac out came a quantity of clear or sanguinolent fluid from a hydrocele or hæmatocele, with the complete subsidence of the swelling. The difficulty is increased tenfold in cases like the present if there be supervention of inflammation in the wall of the tumor, and along with it pain and vomiting.

The data that enabled me to diagnose the case as varicosity of the veins were the absence of gurgling sound when squeezing the tumor, and the non-existence of impulse when coughing. In all reducible hernia the presence of gurgling proves the nature of the tumor beyond a doubt, but its absence in all cases is not necessarily a negative evidence; for when the tumor is a small one, and the intestines empty, it is not unfrequent that we fail to obtain the characteristic sound. Hernia generally comes down at once on standing or coughing, but this used to swell out gradually within three or four minutes after reduction and assume its fullest size. It was visible, though much smaller, even when the patient was in a lying posture.

It is usual to find in such cases varicosity of the vein for some distance downward in its course, but here the aburpt contour of the swelling served to add to the difficulty in diagnosis. As the swelling was seated just over the saphenous opening, I have no doubt that had such varicosity existed it might have been in the deep-seated veins of the thigh, and was consequently hidden from our sight. We frequently observe varicosity of the external pudic vein over Poupart's ligament, and simulating in the inguinal region a case of reducible inguinal hernia. A mould of such a case, taken by Dr. Fayrer in the Medical College Hospital, Calcutta, and preserved in the library, will show how delusive is the appearance, and how difficult is the diagnosis.

A NEW METHOD OF APPLYING EXTENSION TO FLAPS OF STUMPS.

By Frank P. Foster, M. D.,
Late Resident Surgeon to the New York Hospital.

In the treatment of stumps it often becomes an object to make the most of what remains, in the way of flaps, after sloughing has taken place. For this purpose Dr. R. F. Weir employed elastic extension, in the hospital under his charge at Frederick, Md., during the early part of the late war, and at about the same time I observed excellent results from its use in the New York Hospital, during my pupilage at that institution. In some of those cases I applied the weight and pulley in the same manner as they are used for fracture of the thigh, and in others (leg stumps), where there was extensive ulceration over the crest of the tibia, with a tendency of the soft parts to fall backwards *en masse*, leaving three or four inches of the tibia exposed, I placed the stump in a fracture-box, sustaining it by a broad strip of adhesive plaster passing under it, and thence upwards on either side, over the edge and down the outside of the sideboard of the box ; and finally attached a weight to the end of the box, by a cord running over the foot of the bed.

I have recently met in private practice, a case in which, from the tender age and great restlessness of the patient, a child sixteen months old, some modification of the appliance was called for. This I effected in the following manner:

A U-shaped piece of stiff iron wire, wound with adhesive plaster, was applied so that an arm of the wire passed up on either side of the stump. The counter extending straps were fastened to rings at the free ends of the wire, and the ordinary extending stirrup were fastened to the cross-bar by means of a strip of elastic webbing. A large bag of bran was then placed under the ham and secured to the limb by means of strips of muslin passing around the leg and thigh. This bran-bag was made so large that any ordinary amount of tossing about on the part of the patient would neither disarrange the appliance nor injure the face of the stump. The flaps soon came into apposition, and the patient made a good recovery, the cicatrix being no larger than if primary union had taken place.

CASE OF COMPLETE EXTIRPATION OF THE TONGUE, FOR EPITHELIAL CANCER.

By George E. Fenwick, M.D., Prof. Clinical Surgery, McGill University. Reported by George Ross, A.M., M.D., House Surgeon, Montreal General Hospital.

A—— R——, aged forty-five, was admitted into the Montreal General Hospital, under the care of Dr. George E. Fenwick, on the 18th of November, 1868, suffering from cancerous disease of the tongue. He is a man of rather full habit and generous mode of life. He has been accustomed to smoke a pipe for many years, but says that he always held the pipe in the *right* side of his mouth, whereas it is the *left* side of the tongue which is diseased. He has always enjoyed excellent health until the commencement of this affection, and there is no history whatever of cancer in his family.

His notice was first attracted to the tongue, in the month of November, 1867, when a small, flat, warty excrescence was found on the left side of that organ, and about midway between its base and apex. This excrescence was ligatured in January, 1868, by Dr. Grant of Ottawa, having in the meantime increased considerably in size. The base which was left, however, always remained sore and ulcerated, and has continued steadily, though very gradually, to increase in extent from that time until the present. On two occasions profuse hemorrhage occurred, which was arrested by the use of the perchloride of iron: this left him in a very weak and depressed state, and being anxious to be rid of his malady he determined to seek other advice, and came to Montreal, accompanied by his surgeon, Dr. Bell, of Ottawa.

His present condition is as follows: An ulcer is situated on the left side of the tongue; it extends from within three lines of the apex of the organ, getting gradually wider as it proceeds backwards to within ¾ of an inch of its extreme base; thus involving a triangular surface of about 1½ inches in length, by ¾ of an inch in width. The surface of the ulcer is unhealthy-looking, devoid of granulation, and exudes a copious acrid, thin, very fœtid fluid. The margins are raised and extremely firm; nearly cartilaginous. No nodules can be felt in any other part of the tongue, the remainder of the mass seeming soft and healthy. Immediately beneath the ulcer on the floor of the mouth, there is a small spot of the mucous membrane which seems to have taken on the diseased action, as there is here a superficial, which has obstinately refused to heal. The submaxillary and sublingual glands seem to be quite unaffected, no hardness or change of any kind in them being perceptible.

The disease was diagnosed by Dr. Fenwick, as *Epithelioma*, and a rather favorable prognosis, in case of operation, consequently given.

The Doctor decided to remove the *whole* tongue at once, rather than increase the risk of recurrence by leaving some portion behind, which might possibly be already involved. Dr. Campbell, Professor of Surgery, McGill University, who was consulted, was also of opinion that complete eradication was advisable.

Accordingly on Friday, the 20th of November, the patient having been put under the influence of chloroform, the operation was performed by Dr. Fenwick, assisted by Drs. Campbell and Bell (of Ottawa). The steps of the procedure were as follows:

An incision, about one inch in length, was made below the chin, exactly in the mesian line, through skin, fascia and muscle, down to the floor of the mouth; a very long curved needle in a handle was then passed through this into the mouth emerging to the right of the frænum linguæ and close to the root of the tongue—this needle carried a strong thread to which was attached the chain of the écraseur. The chain of the écraseur thus introduced into the mouth was passed completely round the base of the tongue, being pressed back as far as possible by Dr. Campbell. The tongue was then transfixed by a strong cord and drawn well forward out of the mouth. The instrument was locked, and constriction immediately commenced. Fifteen seconds was allowed to elapse between each click, and at the end of nine minutes and thirty seconds the separation was found to be complete. The organ was then removed from the mouth by the attached cord, and the operation was finished. The bleeding throughout was very slight indeed. On examination of the tongue it seems as if all the parts cut through were quite healthy.

He was put to bed and kept supplied constantly with small pieces of ice in the mouth. By 10 P. M., whatever oozing there had been during the day had entirely ceased.

Saturday, 21st Nov.—No bleeding, but profuse secretion of tough mucus, which is troublesome, requiring to be constantly removed with a swab for the purpose. Swallows freely, but with some little hesitation. Pulse 100. Quite cheerful. Ordered

R. Potass. Chlorat. dr. ii.
Aquæ Oi.
Ft. Gargarisma.

To be fed on beef-juice, brandy and water, and milk.

25th Nov.—The wound looks exceedingly healthy, granulating nicely. He sat up to-day—can articulate many words distinctly. To use a piece of lint soaked in the following wash as a dressing to the sore:

R. Acid Carbolic dr. ii.
Aquæ Oi.

1st Dec.—Leaves the Hospital to-day. He can now readily swallow such food as soft boiled eggs, etc. He can articulate wonderfully well, being readily understood in almost anything he says. The wound has nearly all cicatrized over. He started that same evening for Ottawa, having to travel by rail a distance of about 190 miles. He bore the journey surprisingly well, arriving at his home the following day, 2d December, at eleven A. M.—*Canada Medical Journal.*

ON THE TREATMENT OF ANEURISM BY IODIDE OF POTASSIUM.

By Dr. G. W. Balfour, of the Royal Infirmary, Edinburgh.

Dr. Balfour commences this very interesting paper by relating the particulars of three cases, treated under his own direction, in which the results were very satisfactory. In one of the cases there was apparently an inveterate aneurismal diathesis, as there were several aneurisms; but still, under the use of the iodide of potassium, given in thirty-grain doses twice a day for a considerable period, the improvement was well marked, and the symptoms of aneurism dis-

appeared in certain arteries, although they persisted in others. Dr. Balfour, after remarking upon the serious character of the disease, and the hazardous remedies sometimes proposed for its relief, expresses his belief that the success achieved in his cases has been sufficiently well marked to justify him in recommending a further trial of the iodide in the treatment of aneurism. The use of the iodide for this purpose has been adopted, not from speculative ideas, but from empirical observations, which have been made almost accidentally, for the first case so treated seems to have been one under the care of M. Nélaton, who administered the iodide only because the patient stated that he had derived benefit from its use under other surgeons. To the surprise of M. Nélaton all the symptoms were improved, and the tumor almost entirely disappeared. M. Bouillaud next followed out this plan of treatment in four cases, in one of which the improvement was well marked; and in the East Indies Dr. Chuckerbutty, of Calcutta, found out, almost accidentally, that an aneurism of the innominata became gradually solidified under the use of the iodide given to relieve a bronchial complaint, from which a patient was at the same time suffering. Hence Dr. Chuckerbutty was induced to treat several other cases of aneurism in the same manner, and he has recorded the particulars of three. In two of them the result was fatal; but still, even in these, considerable relief was obtained, and in one the sac was found after death filled with dense, solid coagula. Dr. Chuckerbutty points out that the consolidation of the contents of the aneurismal sac is the important fact in the history of these cases, and he thinks that this result depends upon some property of the iodide in reference to the coagulation of the blood. Dr. Roberts, of Manchester, has also employed the iodide in the treatment of aneurism with very considerable success. Dr. Balfour remarks that out of fifteen cases of aneurism treated by the iodide of potassium, of which the particulars have hitherto been published, there has been relief in a marked degree to the sufferings of the patient in all but one, and in twelve there was undoubted diminution in the size of the sac; while in a few there has been apparently a perfect cure. In order to effect the desired end, several circumstances must be carefully attended to, and especially the dose, which, in the cases related, varied from five grains to thirty, three times a day. Coryza, salivation, and diarrhea, occasionally follow the use of the iodide; but in such cases the inconveniences may be obviated by the temporary discontinuance of the drug. The iodide must also be continued for a very considerable time in most instances, some cases requiring at least twelve months. Rest in the recumbent posture is also a matter of paramount necessity, and the diet should be carefully regulated, avoiding the evils of starvation on the one hand, and of plethora on the other. Dr. Balfour does not agree with Dr. Chuckerbutty, that the efficacy of the iodide depends upon its power of increasing the coagulability of the blood; but he attributes to it a sedative action on the nervous system analogous to that exercised by the bromide of potassium.—*Edinburgh Medical Journal*, July, 1868.

PRACTICE OF MEDICINE.

CASE OF INFANTILE CONVULSIONS.

By Robert Turner, M.D., of Keith. (Read to the Medico-Chirurgical Society of Edinburgh, 20th May, 1868.)

Mrs. —— was delivered of her sixth child, a son, at the full term, after a natural and comparatively easy labor of not more than five hours' duration, on the 16th of January last. She had suckled all her other children, who are alive and healthy. The child born at the above date was of more than average size, well formed and well nourished. The supply of milk from the breast being somewhat scanty, it was eked out by an occasional draught from the nursing-bottle of one part of fresh cow's milk to two parts of water, with a little sugar, and no other nourishment was given. During the first week of his existence, the child appeared to thrive under this regimen, continuing plump and lively, drinking and sleeping well, crying and struggling vigorously in resentment of the common *désagréments* of early infantile life, but resuming his tranquillity on their cessation. The remains of the cord separated about the usual time, and there was no subsequent inflammation around the umbilicus.

Defecation and micturition were regular. It was remarked by those about him, almost from his birth, that he was easily disturbed by any sudden noise,—as the falling of a coal from the grate, the creaking of a door, or even by an attendant breaking silence abruptly; but beyond this, which may, perhaps, be regarded as a manifestation of some degree of nervous hypermobility, there was no indication of the slightest departure from the condition of perfect health throughout the period in question. About the end of it, however, the tongue became furred, the bowels sluggish, and the dejections scanty, of unnaturally firm consistence, pale, or at times of a green color. There was flatulent distension of the abdomen, occasional tormina, and, although less frequently, hiccup and vomiting after nursing. Mild aperients—castor oil and magnesia—and carminatives (on the occurrence and at intervals of an hour during the continuance of an attack of gripes) were now ordered, with pepsine wine in doses of five drops three times a day; and, the maternal supply of milk being now rather more abundant, the use of the nursing-bottle was discontinued. No amendment followed the adoption of these measures, and at my visit on the 27th of January my attention was directed by an experienced, watchful monthly nurse, to the first warnings of the dreaded "fits." A warm bath, cold applications to the head; a succession of warm poultices to the abdomen, a minute dose of gray powder with castor oil, and afterwards an enema of oil of turpentine and castor oil, were prescribed and promptly employed, but the malady, notwithstanding, became rapidly developed. The convulsions, which were of the usual character, affected the muscles of the face and the eyeballs and the left upper and lower extremities, recurring with progressive frequency, as well as severity, until intervals of not more than from seven to ten minutes divided the attacks. Their average duration was from one to two minutes, and their only very decided periods of abatement followed a free discharge of flatus or fæces. Once or twice during a seizure of more than ordinary violence some froth issued from the mouth, and about as often a brief arrest of the movements of the chest and a choking noise in the throat told that respiration was threatened. No degree of coma succeeded even the severest of the attacks. In these, however, the pupils were uniformly dilated, but resumed their normal condition immediately after, when the expression of the face and the state of the affected extremities also became quite natural.

The affection in this case appeared to have a merely peripheral origin in derangement of the digestive organs—how induced, unless by the supplemental (and now discarded) "bottle," I was at a loss to determine. I saw no reason to suspect the mother's milk of harboring the *fons et origo mali*, but, by way of cutting off every possible source of mischief, a change of nurse was decided on, and the services in this capacity of a healthy young woman were procured. Some eight or ten hours before her arrival I began the administra-

tion of iron, so strongly recommended, and with so much apparent reason, by Dr. Lawrence of Montrose, in the *Edinburgh Medical Journal* for June, 1858. The form of the medicine I employed was the saccharine carbonate, the dose half a grain, afterwards increased to a grain, every second hour, and eventually every hour. A free action of the bowels was at the same time maintained by the means already mentioned. On the 3d of February the fits, which from the previous day had been perceptibly on the decline, ceased entirely; and for the three succeeding weeks all went well with my little patient. The 24th of the same month, however, witnessed the return of the convulsions, and they quickly assumed even more than their former severity, the *lœdentia* obscure as ever. For days and nights the attacks were almost continuous, so that it became impossible to suckle the child, and very difficult to feed him with the nurse's milk from a teaspoon. The countenance was now pallid, the anterior fontanelle somewhat distended, the cry feeble, and the pulse—which had been hitherto wonderfully little affected—weak, frequent, and slightly irregular. The plan of treatment above detailed was resumed, with the addition of stimulating embrocations to the spine, but without avail; the iron, given assiduously in the largest dose for five successive days and nights, not appearing, at any time, to exert the slightest beneficial influence.

In these untoward circumstances, it occurred to me to make trial of the bromide of potassium; my own experience of the value of this drug, in adult cases betokening superpolarity of "the true spinal system," having satisfied me that its great and growing reputation as a nerve-tonic and sedative is not undeserved. The iron was therefore discontinued, and the use of the other salt begun instead. Impressed with the necessity of treading cautiously on this new therapeutic ground, all the more that I was prevented by circumstances from watching very closely the effects of the medicine, I resolved to commence with a dose regarding the safety of which I could have no misgivings, and so feel my way to its freer administration. On the 1st of March, accordingly, one-fourth of a grain of the bromide, dissolved in water and syrup, was given, and the same quantity directed to be repeated every second hour; the application of cold to the head, the warm poultices over the abdomen, and the embrocation to the spine, to be continued. An inert state of the bowels persisting, two grains of rhubarb were ordered every morning, and, this failing to procure a sufficient evacuation before, an enema of turpentine and castor-oil to be administered at night. On my visit the following morning, I was gratified to learn that a decided impression had been made on the disease, the fits being perceptibly less violent, and fully half an hour elapsing between them. The aspect of the child was also improved; there was now no sign of cerebral engorgement, the pulse was regular and rather less frequent, the voice stronger, and he had regained the ability to help himself from the breast. Thus encouraged, and finding that the medicine was well borne, I increased the dose to half a grain every second hour. At my evening visit the patient's amendment was still advancing. I was informed that, since about noon, an hour or more had always passed without the occurrence of a fit; and that every new seizure was less severe than the one preceding it. The bromide to be continued as before.

3*d March.*—Improvement, in all respects, steadily progressive. The attacks continue to abate in degree, and now never involve the extremities, but are confined to the muscles of the face. The intervals extend to three and four hours, and during the night and early part of to-day, have been usually passed in tranquil sleep, from which the child had frequently to be roused to get his medicine at the appointed time. Doubting the propriety of interfering so much with the ministrations of "tired nature's sweet restorer," I desired the bromide to be given in doses of a grain every fourth hour, and enjoined that a longer period than this should never be allowed to expire without the child being put to the breast.

4*th March.*—Since yesterday evening the convulsions have been but just perceptible, and several hours have generally elapsed between them. I chanced to witness one this afternoon—perhaps I induced it by having sufficient light admitted to allow me to inspect the patient's eyes, etc., and otherwise disturbing him in the course of my examination; but this attack was of the mildest possible description. It set in with some rolling of the eyes, followed by rapid nictation, and slight twitching of the lips—and this was all. It passed off completely in a few seconds, after which the child took the breast with avidity.

The bromide to be given in grain doses every sixth hour.

5*th March.*—Child doing very well. No fits since yesterday. The bromide to be continued as before.

7*th March.*—Recovery advancing without interruption. No more fits. The bromide to be given in the same dose, but only night and morning.

The very slight attack observed on the 4th proved to be the last of the invasion, and the after-progress of the case has been most satisfactory. Nutrition and growth have proceeded with the child as if no check at any time had been given to these processes. In short, at the date at which I write, (the 25th of March) the subject of the foregoing narrative is the very impersonation of well-to-do babyhood.

Notwithstanding the total disappearance of the attacks for the past three weeks, I continue the use of the remedy in the dose last stated, and mean to do so for some considerable time, should no symptom of bromism arise. I am not without a suspicion that the iron was too soon given up. It certainly controlled partially, and even to all appearance suspended, the fits in the first seizure, although its influence was not so strikingly powerful as that of the other salt; and it is possible that a more prolonged use of the saccharine carbonate might have arrested the relapse, to cope with which this drug so signally failed. But be this as it may, such precaution is, I believe, imperatively demanded in the case of the bromide of potassium. Undoubted as the power of this agent is over various forms of nervous disease, the observations of Dr. Begbie, (*Edinburgh Medical Journal* for December, 1866, p. 483) Dr. P. Victor Bazire, (Trousseau's *Clinical Medicine*, Part I, p. 98, *et seq.*) Dr. Russell Reynolds, (*System of Medicine*, Vol. II, p. 281) and others—observations, I may add, in accordance with my own experience—seem to point to the conclusion that this power is what may be termed a *provisional* rather than a directly curative one—a power, that is to say, able to keep in abeyance diseased action (probably by inducing a condition of the nervous centers incompatible with the manifestation of that action, and thus gaining time for the accomplishment of a positive cure by other means or influences) but incapable of achieving by itself such a result. Whatever the *ratio medendi* here, it is a corollary flowing distinctly from the observations just referred to, that to obtain all possible security against the recurrence of the malady for which it is employed, we must continue the use of the bromide of potassium for a length of time, to be determined by circumstances in individual cases, after seeming recovery.—*Edin. Med. and Surg. Journal.*

ORIGINAL COMMUNICATIONS.

ON THE MANAGEMENT OF CHILDREN.

By E. MALCOLM MORSE, M.D., San Francisco.

A physician in large practice has but little time, and often less inclination, to devote much of his attention to this important and sadly neglected branch of our profession. In each of the families in which we practice, our duties are not merely limited to prescribing for the diseases as they occur, but it is also our business, as physicians, to watch over the well-being of each member of a family that is under our medical direction; to give them good advice when we find it necessary for the preservation of their health; and especially to direct the parents as to the best means of bringing up their children in such a way that they may remain as much as possible in good health, and acquire strong constitutions.

I am well aware that what I am about to write contains no very new or startling information on this important topic. I am not so much "*cupidus novarum rerum*," as I am anxious to bring before the minds of some of my medical *confrères* certain valuable facts which many of them have known, and almost, or entirely forgotten: certain directions, taken from our ablest authorities on this point, which, if followed out, would save the lives of hundreds of children. The importance and value of these practical and *common sense* hints which I have *collected*, must prove my apology for the imperfect manner in which I have arranged them. There are very few physicians who cannot pick up one or two things, probably of much service to them, from some of the authors I quote in this article.

Dr. Gunning Bedford recommends tying the umbilical cord of the new-born infant with a piece of *tape*, instead of the old-fashioned method. He contends that there is less danger of *trismus nascentium*, and inflammation of the umbilical vessels, when the operation is performed in this way. I would recommend leaving the ends of the tape long enough, after tying the first knot around the cord, to bandage all that part of it that remains attached to the child. This will have a tendency to check the hemorrhage that sets in sometimes from the shrinking of the cord, especially when it is large; another very useful object is obtained by preventing it from sticking to the bandage, or clothes, and in this way the danger of pulling too hard on it when changing the clothes is obviated. After the child has got safely through the perils it is exposed to during the labor of its mother, the "*wise women*"—*lucus a non lucendo*—will generally make an attempt on its life by over-feeding it, dosing it with oil, calomel, "Mrs. Winslow's Soothing Syrup," or by catching it by the heels as it lies on their laps and turning it *upside down* with a jerk, "in order to keep the liver from sticking to the side"—an operation which, I think, ought to be performed on every nurse who tries it on a new-born baby. I once knew a distinguished physician who gave a large dose of calomel to every infant whose mother he attended in confinement; he contended that it prevented the child from having colic.

Dr. Bedford says: "The absurd and mischievous practice prevails, too generally, of giving the little infant oil or some other medicine almost simultaneously with its birth, and of filling its delicate and much-abused stomach—a stomach whose powers of assimilation are extremely feeble—with food of domestic manufacture; and hence the 'pap bowl' is a fixture of the lying-in room. This practice, which is one of the products of remote but regular tradition, is fruitful in bad consequences, oftentimes proving the starting-point of disease and death. Why, gentlemen, is it not strange that, with all our boasted intelligence, we should be so inferior to the brute creation in the management of the young? Do you see the slut, with nothing but instinct to guide her, guilty of these absurd practices? Here, there is no medicine given, no pap forced down the throats of her innocent little offspring. The pups, as soon as they come into the world, seek each one the teat of its parent, and from these teats they extract both medicine and nutriment. They grow and become developed; they are healthy, and rarely do they need the services of the physician, for the reason that they observe the ordinances of nature. My rule, therefore, is, as a general principle, to give the new-born child nothing, for the reason that it needs nothing but the material which nature has so carefully and elaborately prepared for it; and that material is the mother's milk."

[To be continued.]

ALUM TAMPON.

By W. F. McNUTT, M.D., etc., etc.

The idea seems to be growing more universal with the profession that hemorrhage in the early months of miscarriage—say up to the fourth—had better be arrested by the tampon, and the uterus allowed to expel its contents, than to attempt to extract the ovum by the means of hooks and forceps. And also to resort to the tampon to arrest hemorrhage in cases where there is doubt whether or not the contents have been expelled, rather than to attempt to explore the cavity of the uterus, through the rigid, irritable, and long canal of the cervix. Of course, where the ovum is impacted in the canal, or held in the cylindrical grasp of the cervix, it should be removed.

The more general this practice becomes, the more necessary it is to have at hand an efficient and convenient tampon. And the very fact of having at hand a tampon which is both convenient and efficient, is a strong inducement to resort to its use. The want of confidence in the ordinary tampon, or the inconvenience of using or removing it, or the fear lest flowing should come on profusely in our absence, leads one to attempt the extraction of the ovum by the use of instruments; and especially in the country is this the case, when called ten or twenty miles, it may be, at the very first appearance of hemorrhage.

The alum tampon meets every indication. It can be used at any time by any person, or removed at any time by any person. It gives comparatively no inconvenience, and is always reliable. If called to a case of miscarriage, and the hemorrhage has ceased, leave an alum tampon with the nurse, to be passed into the vagina if hemorrhage recurs. And after having used it a few times, one leaves his patient without the least fear or anxiety, which is usually so harassing to the physician in these troublesome cases. Since learning the use of this tampon, from my friend, Dr. Stillman, of this city, I feel less anxious to know, when called to a case of miscarriage, whether or not the ovum is expelled, and less inclined to resort to the use of instruments to remove it when not expelled.

The tampon consists of a piece of alum, about the size and shape of a turkey's egg, with a hole drilled through its center, for the passage of a string, by which at any time it can be removed. Unless the dissolved alum reaches the bleeding surface, one cannot well account for the sudden and complete arrest of the hemorrhage. Though the alum coagulates the blood or albumen, there is no clot formed which distends the walls of the vagina and thus arrests the hemorrhage. The

coagulated blood has something the appearance of dried coffee-grounds, and is usually in no great quantity, though the hemorrhage was profuse when the alum was passed into the vagina.

Dr. Stillman, who has used no other tampon in his cases of miscarriages for the past five years, has never seen any bad results from its use. In protracted cases, where several tampons have been entirely dissolved, slight smarting is the most inconvenience experienced.

STILLICIDIUM LACRYMARUM.

BY GEO. H. POWERS, M.D.

An interesting case of this troublesome affection was brought to me recently by a physician of this city, which presented the anomaly of entire absence of the punctum in the lower lid. I was unable to find any orifice with a fine probe, or even with the point of a pin, and a strong magnifying lens failed to reveal the situation of even a capillary opening into the canaliculus. The upper punctum and canaliculus were patent, as was evident from the comparatively small amount of the tears accumulated on the lid, but for two or three years the patient had been subjected to great annoyance from the residuum of the lacrymal secretion which the upper punctum failed to carry off. As the patient could not recollect any acute inflammation of that lid, of a serious nature, and as there was no sign of any pre-existing abscess of the lacrymal sac or duct, I thought entire relief would probably be gained if we could once open the canaliculus, and that the sac and duct would probably be found in a healthy condition. Accordingly, I took up with forceps a fold of the tissues of the lower lid, near the seat of the normal punctum, taking care to include the calibre of the canaliculus, and made a transverse cut with fine scissors through it; through this opening the probe easily entered the canaliculus, and, inserting a Bowman's director, the point of which was carried through to the farther side of the sac, I slit up the whole length of the canaliculus with a triangular, sharp-pointed knife. The sac and nasal duct proved to be open and in healthy condition, easily admitting the passage of the probe; and already the difficulty is removed, and the tears flow through their natural channel.

The after-treatment of the case was simply to keep open the canaliculus by the occasional passage of a probe until the edges had become cicatrized and all danger of reunion was passed.

These cases are often extremely difficult to manage, and unsatisfactory in result, especially where, as often happens, the unfortunate subject suffers the inconvenience to exist for many years before he musters courage to consult a surgeon. In some cases, even after Bowman's operation of slitting up the canaliculus, and after a long-continued course of probing the nasal duct, the epiphora is still unsubdued. In such cases the operation of removing the whole or a part of the lacrymal gland would seem to be indicated, as described by Mr. Laurence, of St. Bartholomew's Hospital, Chatham, England, in the January number of *Braithwaite*.

San Francisco (526 Pine St.), March 13th, 1869.

To the Editor of the California Medical Gazette:

Sir—At a time when small-pox has committed such ravages in the city, every one who has the advantage of possessing any knowledge on the subject should contribute it for the public advantage. The observations you make in the March number of the California Medical Gazette, on the efficacy of properly performed vaccination in preventing these general visitations of small-pox, are very judicious; and you justly lament that the practice of vaccination has lost ground in the estimation of the public. You observe, farther on, that "true and efficient vaccination can only be performed with fresh lymph—that is, from arm to arm, the vesicle being a week old." I fully admit that vaccination is best so performed, and ought to be thus performed; but I cannot think that it is the only way in which the operation can be efficiently done, since I do not believe that crusts are necessarily "effete;" and sometimes the only alternative we have is to make use of dry lymph forwarded from a distance, as in the military service.

You also make some observations on imperfect or irregular vaccination, by which the system is not effectually protected from small-pox; and I do not know that I should altogether agree with you as to the circumstance in which this irregularity consists. You say that "Dr. Marson, the resident medical officer of the London Small-Pox Hospital, is of opinion that *four* fully formed and distinct vaccine vesicles are required, in order to afford complete protection for the *whole of life;* and he infers that a diminution in the number of perfect vesicles affects the duration of the security, rather than its degree while it lasts." This was not the opinion during the time I was at my studies in London, at Guy's Hospital. You quote a recent English reviewer, who observes: "At, and for a certain period after the time of Jenner, the practice of vaccination was much in the hands of men who had been taught by him, either orally or in his writings, and who thoroughly understood the work they had to do. But as the practice became more general, the conditions of its success were to some extent lost sight of. The writings of Jenner were found only in the hands of the curious in medical literature."

I became a member of the Royal College of Surgeons of England in the year 1823, and at that time the opinions on this subject were precise, clear, and simple. The differences between the genuine and spurious vesicle, as to their stages and appearance, were considered as of the highest importance, a point which you have not noticed in your editorial on the subject from which I have quoted. In the genuine case a simple uninflamed vesicle is presented until the eighth day, at the end of which (a little later or sooner occasionally) a slight appearance of inflammation begins to appear around the vesicle, which on the tenth day arrives at its height, forming a large inflamed areola. On the other hand, in the spurious case, this inflammation commences on the fifth day, and sometimes earlier, becoming as extensive frequently on the sixth or seventh, as occurs in the true pock on the tenth; the lymph also verging towards pus, and the scab forming earlier than it should do. Much attention was also paid to the state of the system at the time of vaccinating, as certain conditions were considered to obstruct the regular course of the disease, and favor the formation of the spurious affection. Such is the case with certain cutaneous eruptions, and febrile states of the body, so that under such circumstances preparatory medical treatment was had recourse to, as had been generally done under inoculation for small-pox; a practice almost universal before the introduction of cow-pox, by Dr. Jenner. Whenever, from any such causes, the character or stages of the complaint were thus irregular, future security from small-pox was pronounced to be doubtful, without a subsequent vaccination under more favorable prospects. And yet, people would vaccinate each other with such instruments as sewing needles, unknown to their medical attendants, and what wonder that the occasional occurrence of variola should take place. A medical student, a room-mate of my own, died in London of small-pox, who had been vaccinated by an officer in the army in his childhood.

Notwithstanding the authority of Dr. Marson, I should consider the number of places in which the virus is inserted of little importance. From one pustule, in constitutions where partial plethora exists, as frequently happens in indulged and over-fed children, a very considerable local inflammation and a smart attack of symptomatic fever will sometimes occur, with soreness and enlargement of the glands in the axilla. I was always in the habit of vaccinating in two places, but rather to insure that one might take effect than from any conviction that the number was of any importance. Such were the opinions with which I set out in life after the usual routine of study; and in the course of a practice of upwards of forty years, I have not found occasion to change them. I should have added that the opinion of the profession in England, at the time I have been writing of, was, that if vaccination, in any particular case, afforded security at all, it was afforded during *the whole of life;* any doubt about the *duration* of the security, if it *once* existed, although sometimes talked about, was not generally held. But it was considered of much importance by accurate observation to be satisfied that such security was once effected.

I remain, very respectfully, your obedient servant,

THOMAS H. SNOW,

Member of the Royal College of Surgeons, of England, and late Assistant Surgeon in the U. S. Army.

California Medical Gazette.

SAN FRANCISCO, APRIL, 1869.

☞ *All letters and communications to be addressed to the* "Editor California Medical Gazette," care of A. Roman & Co., San Francisco.

VENEREAL CONTAGION.

We are safe in saying that there is no wider range in the field of medical science, or in any science, where the liberal and advanced student can work to greater advantage for the benefit of society than in the study of the laws which govern, and the best means of ridding ourselves of contagious diseases. While preventable diseases continue to be viewed in the light of moral ignorance, moral bigotry, moral hypocrisy, and moral superstition, our boasted science of hygiene and our much-lauded state of civilization, are but idle names. In fact, if we compare the intelligent ideas of Hippocrates on this subject with the ideas of many of our present leading medical teachers, it is a sad fact that this department of our science shows unmistakable signs of retrogression. Mr. Solly, President of the Medical and Chirurgical Society of London, "can reiterate his opinion at the Admiralty," that "far from regarding syphilis as an evil, he regarded it, on the contrary, as a blessing, and believed that it was inflicted by the Almighty, to act as a restraint upon the indulgence of evil passions. Could the disease be extirpated, which he hoped it could not, fornication would ride rampant through the land."

In 1854 Dr. Druitt quotes Sir William Ferguson, who says: "The irregularities of man are at all times punished by the generation of diseases and the loss of health; and it would be difficult to believe in a superintending Providence, if the transgression of human laws should be permitted to remain unpunished," and adds, "the author fully concurs in this opinion." What a pity that such cant should be accepted as medico-moral philosophy, and venereal contagion allowed "to ride rampant through the land."

Unlike most of our moralistic fallacies, these have not even the dignity of age, for Hippocrates held the most enlightened and common-sense views on this subject. Said he: "To me it appears that such affections are just as divine as others, and that no one disease is either more divine or more human than another; but that all are alike divine, for that each has its own nature, and that no one arises without a natural cause." "Happily," says the *Public Health*, London, "the views of Hippocrates have been revived in France by the illustrious Comte and his disciples, Littre, and others; so that France, which was the first to move in the matter of the prevention of venereal diseases, is gradually bidding adieu to those phantoms of a crude philosophy, and entering into the positive study of the origin of evils with a view to remove them."

We hope that the progressive spirit of our people will throw off the fetters of superstition that have been so long cramping the mind, and that San Francisco will be the first city in our broad Union to adopt the French police system of examination of prostitutes.

So long as there remains in our city alleys and dens swarming with the most depraved and diseased of China, European and American women, so long will there flow from San Francisco a sea of misery, whose poison will be felt in every portion of our fair Pacific slope. We hope that the time is not far distant, when our citizens will awake to the importance and humanity of confining prostitution within licensed walls; when the word civilization, applied to our city, will cease to be a myth.

To the intelligent and advanced philanthropists we need address no argument to secure their assistance to establish laws for the examination of all public prostitutes; to the fanatically virtuous, we appeal to that weak point in narrow minds, self-interest, and tell them, that to keep the baleful poison, venereal contagion, from their own families, it is becoming necessary to limit prostitutes to licensed houses, and to establish a police system of examination of public prostitutes.

In another part of the Gazette will be found an excellent letter from Dr. Snow, on vaccination. We recommend its perusal to our readers, especially that part which refers to the characteristics of the true and

spurious vaccine vesicle. There is, however, an opinion towards the end of the letter which, if acted upon, would, we believe, lead to a great deal of mischief; and being also the faith of others, has, we have no hesitation in saying, been the source of many cases of variola during the present epidemic.

Dr. Snow says, that forty years ago it was "the opinion of the profession in England, that if vaccination, in any particular case, afforded security at all, it was afforded during the whole of life; any doubt about the duration of the security, if it once existed, although sometimes talked about, was not generally held." We know very well that this was the prevailing opinion at the time specified, but accumulating and overwhelming evidence during forty years has entirely changed it; and now those of most experience, and of best authority, emphatically recommend re-vaccination, in order, as Dr. Seaton states, to repair whatever was irregular in the course of a primary vaccination—to supply what was imperfect in the *amount* of infection in cases in which the *course* of the disease was regular, and to extinguish any susceptibility to small-pox which may remain or which may re-arise in any person whose primary vaccination may have been complete and regular. Dr. Seaton recommends that universal re-vaccination should be performed at fifteen years of age if the primary operation was performed during infancy. He deprecates the practice of leaving re-vaccination to be performed till the outbreak of an epidemic of small-pox occurs, because of the difficulty of making it universal at such a time, and also on account of the difficulty of procuring good lymph to meet so sudden a demand.

Re-vaccination is a precautionary measure; primary vaccination is only a precautionary measure likewise: and we hold that the former is as necessary as the latter, and that it should be as systematically performed, Dr. Seaton says: "The utility and necessity of re-vaccination do not stand on any speculative reasoning, but upon broad grounds of observation and experience."

The daily newspapers—such of them at least as do not obtain the fat advertisements—are loud in their virtuous denunciations of a miserable old braggart charlatan, who spends, the town says, some twenty-five hundred dollars a month, for a column or two of a morning paper, in which he sets forth his wonderful machine and his intuitive talent in curing disease, backed up by a host of mendacious certificates.

The exposure of an ordinary swindle by this advertiser, in the last number of the *Pacific Medical Journal*, is the origin of this outcry.

We very much wish, and should be very much gratified, if the indignation expressed were truly felt; but when scarcely a daily paper that is published in this city does not refuse to advertise any charlatan's notice—simple, vicious or otherwise—it seems to us to be sheer wantonness to affect a feeling of virtuous indignation at the result that advertising is sure to produce.

Some of the dailies have published very sensible remarks on quackery, and the following from the *Chronicle* is about the best:

The Plague of Quacks.—Pharaoh was plagued with the plagues of vermin, of frogs, of locusts and of darkness; but the sacred chronicle makes no mention of a plague of quacks. In this, Egypt was more blessed than San Francisco, where astrologers, clairvoyants, healing mediums and men of science, who guarantee to cure all diseases for a "consideration," constitute no inconsiderable portion of the population. Byron in his tragedy of *Cain* represents the wife of the first homicide as exclaiming in accents of awe and horror, after looking upon the corpse of Abel, "Death is in the world." Certain of our contemporaries have recently indulged in an outcry against quacks and the dealers in panaceas and cure-alls, so loud and portentous as to suggest the idea that they have just awakened to the fact that quackery is in the world. The truth is that this form of charlatanism is as old as human nature, and in one shape or another it will exist till time shall be no more. It subsists upon the hopes of the credulous, the fears of the timid, the fancies of the imaginative, the delusions of the ignorant; and so long as human nature retains its imperfections and its weaknesses, there will be charlatans and dupes. Legislation is powerless to remedy this evil. No law can be framed by human ingenuity that will prevent the quack from exercising upon his victim. The press is the great engine that these impostors and charlatans have to dread. If the public journals will boldly and faithfully expose their false pretenses and chronicle their frauds and impostures; if they will take the pains to explain to the people the folly of relying upon nostrums to work miraculous cures and the danger of resorting to charlatans for medical aid, they will do more to abate the evil than can be accomplished by all the Legislatures of all the States of the Union.

MEDICINE—A SCIENCE.

We make the following extracts from a case in the St. Louis *Medical Reporter*, which we believe will convince the most skeptical that medicine is an exact science. We make no apology to our readers for the large amount of space which we occupy in our journal with this case. In fact, we are only too glad to meet with a case that so clearly and forcibly illustrates the exactness of medicine as a science.

Dr. McElroy, of Zanesville, Ohio, who reports the case, says:—"Willie Spurgeon, aged 10 months, refused the breast, and became very restless, fretful and feverish, 17th October last. Had frequent discharges from the bowels, excessively fetid. Mother is convalescing from typhoid-malarial fever. Child nursed during her illness, etc., etc."

Oct. 19th.—"Saw child first time. Bowels still very loose, and smell so bad as to make the mother

sick at stomach. Has lost flesh rapidly. Tongue coated, etc., etc. Temperature, 101."

"*Diagnosis.*—Nutrition wholly arrested, as attested by its refusal of food. Destructive *metamorphosis* proceeding far too rapidly, as attested by the increased temperature; and of *albumenoid* tissues, as attested by the extreme fœtor of the debris in the discharges. Though bowels were still very loose, there was partial retention of the debris of tissue *metamorphosis*, as evidenced by the cerebral symptoms of restlessness and irritability."

Prescription.—Carbolic acid, gr. v.; mint water and simple syrup, of each half an ounce. Teaspoonful every four hours. Warm bath in the evening. The object of the carbolic acid was *to oxydize the tissue debris*, and *thus render it harmless*, and to retard tissue *metamorphosis*.

October 20th—Child passed a very bad night. Passages from bowels diminished in frequency, and did not smell so bad; was improved in character. Tongue still furred; breath bad; did not take the breast. Temperature 100½. Pulse still rapid; pupils very sluggish and dilated. Loss of flesh very perceptible since 19th. *Destructive metamorphosis* somewhat diminished, as evidenced by the fall of half a degree of temperature; retention of *tissue metamorphosis*, as evidenced by the cerebral symptoms; considerable interference with tissue changes in the great nerve masses, particularly the cerebrum and cerebellum, as evidenced by the state of the pupils. Nutrition still entirely suspended.

Prescription.—Warm bath immediately. Two teaspoonfuls castor oil as soon as it is out of the bath. Carbolic acid mixture every six hours.

21st—Patient better this morning. Oil operated freely, and discharges were quite natural. Slept some, but was still very fretful. Pupils very large and sluggish; pulse slower and fuller; temperature 99½.

Diagnosis.—Nutrition still at a standstill. Tissue waste still too large, as evidenced by the temperature.

Prescription.—Pulv. Doveri, gr. x, powders number vj. One powder three times a day, the purpose of which was to retard tissue *changes or destructive metamorphosis*, and thus reduce temperature, and *furnish power to the pupils*. Warm bath in the evening. Carbolic acid mixture morning and evening.

October 22d—Patient greatly improved. Slept well night before. Was decidedly better after the first powder, and continued to improve all day. Commenced picking at a cracker to-day, and takes all the milk the mother can supply. Pupils contract promptly. Temperature 98½. Tongue cleaning up rapidly. Breath no longer fetid. Bowels altogether natural. Pulse nearly natural.

Diagnosis.—The Dover's powder fulfilled expectations. Nutrition resumed, and waste and repair about equalized (tissue making).

Prescription.—Continued Dover's powder every six hours. Requested carbolic acid to be discontinued, but mother informed me it was all gone. Warm bath again in the evening.

October 23d—Patient still better. Temperature 98. Slept well. Is no longer restless or fretful. Pupils natural. Took all the mother's milk, and wanted to eat at table.

No medicine. Case dismissed.

October 24—Saw patient's mother in passing. Says the baby is entirely well.

This case is reported because it is deemed one of more than ordinary interest. The cause of the child's illness was, doubtless, owing to the change in the mother's milk during her sickness, which was characterized by much the same symptoms, except the periodicity in her case, absent in the child's. *Then the philosophy, diagnosis and treatment were all point-blank;* and looking at it from the *termination*, partook of that certainty always gratifying in the retrospection of any case.

The bilious symptoms of the old style practice were strikingly prominent, and yet it was treated without mercurials, or any uncertainty, during its progress.

Comments upon this case are quite unnecessary. It goes to show that if we would have medicine—a science—we must have scientific medical men. Under the eyes of a less *as*-tute observer, this child would be thought to have had simply a little irritation of the bowels, which the oil administered on the 21st cured. Then again, though the ordinary practitioner can look at his case from its termination with certainty, he is too frequently unable to do so with gratification.

We cannot resist the temptation of making a few extracts from a somewhat similar case, in an adult, by the same author:

Mrs. B., aged thirty-eight; robust and hearty; four children. October 27, 1868, 10 o'clock A. M.—Has been sick since yesterday. Partook largely of cream and mush for supper the night previous. Bowel complaint came on latter part of the night. Is intolerably offensive. Very tender bowels, with but little pain. Pulse full, quick and strong. Temperature, 103.

Diagnosis.—Excessive tissue metamorphosis, as evidenced by the high temperature and excited circulation.

Recipe.—Crystals, carbolic acid, etc., to oxydize tissue debris, and render it harmless.

Recalled at 5 P. M. to the case. Patient had violent pain in the bowels.

Diagnosis.—Excessive tissue change in the nerve masses supplying dynamic force to the abdomen.

Oct. 28.—*Diagnosis*—Tissue metamorphosis greatly diminished, as evidenced by decline in temperature, due to both carbolic acid and morphia probably.

Recipe.—Rochelle salt. 5 P. M., patient dressed. No pain. Case dismissed.

Here again is a case, which to an ordinary observer would have passed as belly-ache—from eating too much cream and milk the night before, and which he would have supposed that the morphia and Rochelle salt had cured. He never would even have dreamed that the whole trouble was due to "excessive tissue change in the nerve masses supplying dynamic force to the abdomen."

According to the Boston Directory, Boston contains 574 persons who claim to be doctors. The largest division is composed of the "regular army," so to speak, 275 strong; 13 call themselves eclectics. "Forty-six light skirmishers with globules and infinitesimal weapons follow next." "Then we have a division of female physicians, 60 in number. And bringing up the rear are 180, whom the Directory calls *other physicians.*"

Among the specialties in the last two divisions are electricians, botanic and cancer doctors—males; magnetic, sympathetic, mesmeric, and clairvoyant doctors—females. Also, a

bone-setter who pursues naturepathy, and a female who practices baunschedismus.

There is one regular physician to every 800 people, "and taking the whole medical force, one professor of healing to every 400 souls," calling the population of Boston 230,000. The *Journal* might have added that out of the 230,000, about 30,000 cases are treated annually by charity.

For number and variety we can compare very favorably with Boston. Our Directory gives 354 who claim to be disciples of Esculapius; and supposing our population to be 135,000, we have one professor to every 381 people. Our Directory does not give the number of *other physicians*, but if all those who advertise specialties are designated *other physicians*, we have a goodly number. In our Directory many of the light skirmishers are enrolled in the regular army. Perhaps they exhibit infinitesimal weapons and ammunition, as a blind, and pour grape, canister and Greek fire into the enemy as remorselessly as any of the regulars, when they are expected to conquer or kill.

As for variety, we have botanic, cancer, Chinese, electromagnetic, astrologists, spiritual, waterists, clairvoyant, and one of the baunschedismus order; also one who must be a machineropathist, judging from the name and description of the machinery with which he guarantees to chase away the ills that flesh is heir to.

MEDICAL ORTHODOXY.

We make the following extract from one of our contemporaries, for the benefit of those who believe that the profession is drifting towards skepticism or homœopathy:

"I therefore, after feeling my way for a few days, instituted the following treatment, which, strange to say, I never had occasion to change during the continuance of the malady, except an occasional omission or diminution of the dose. The appended prescriptions were used at such hours, day and night, as not to interfere with the patient's rest, or conflict with each other, and I never found it necessary to suspend, for any length of time, even the elaterium, which I have always found to be very uncertain, and sometimes violent in other proportions or combinations:

"R. Elaterii .....gr. i,
Ext. colocynth.....grs. xx,
Ext. hyoscyami.....grs. iv.
M. ft. pill, No. iv. Take one every 12 or 24 hours.

"R. Decoct. senegae.....Oi,
Syrup, simp.....oz. iss,
Spts. juniper comp.....oz. i,
Tinct. scillæ.....dr. iii,
Spts. ætheris, nit.....dr. vi.
M. S. 2 tablespoonfuls every four hours.

"R. Mass. pil. hydrarg .. ...dr. iss,
Pulv. opii .....grs. viiss,
" Scillæ .....dr. ss.
M. ft. pill, No. xxx. S. Take one three times a day.

"R. Ammonia carb. .....dr. i.
Divide into chart No. xii. S. Take one every six hours.

"Six weeks after this treatment was instituted, I found my patient's abdominal measurement to have fallen from forty-nine to thirty-five inches, and his legs were more like pipe-stems than anything else.

"I attribute his recovery to a good constitution, and the *combination* of remedies."

MEETING OF THE ACADEMY OF SCIENCES.

Specimens from the Artesian Well—The San José Meat Shower—Skeleton of the Mastodon at Petaluma—The Late Earthquake Shock to the Southward—A Slight Shock felt in this City.

The Academy met March 12th, President Blake in the chair. Present, Messrs. Blake, Kellogg, Baldwin, Bolander, Yale, Eloesser, Cooper, Carlton, Lorquin, Harford, Simons, Easton, Brooks and Mudge. Minutes of the previous meeting were read and approved.

Dr. Spencer, of San José, was elected a member, and Dr. W. F. McNutt was proposed by the President.

Mr. Yale presented a specimen of copper pyrites, or sulphurets of copper and iron, taken from the artesian well on Clay street, at a depth of two hundred and eight feet. The immediate composition of this piece is copper, iron and galena, and probably arsenic. In some varieties gold appears, and in others silver. It is of universal dissemination, and has been detected in meteoric stones. It is partly soluble in nitric acid, leaving a residuum of sulphur. It was not found in a stratum, but in a drift, intermingled with pieces of flint and pebbles, showing the drift of a subterranean stream. A further examination of this and other specimens from the well will be made by Mr. Yale. Some specimens of shell and wood were also brought up from the well. The water had come up to within fifteen feet of the sidewalk. He had no doubt of the enterprise resulting in the obtaining of a good supply of water.

Dr. Blake remarked that other attempts had been failures; that in one instance a stratum of rock was encountered which was bored through some forty feet, when no water appearing the project was abandoned. The same result attended the attempt to bore an artesian well in Portsmouth Square some years ago, by the City Government.

The printed proceedings of the Philadelphia Academy of Sciences and of the Boston Society of Natural History, were received.

Dr. Cooper having called on Dr. Kellogg for further information on the subject of the shower of meat, Dr. Kellogg remarked that he believed the statement of the witnesses of the phenomenon to be reliable and correct, and read a communication from W. Frank Stewart stating that instances had been known, especially during the drought of 1863, of flocks of buzzards having gorged themselves with the meat from dead cattle, and then disgorging it upon the plain.

Mr. Bolander stated that Mr. Eloesser desired him to say that instances had been known in Italy of substances falling in this manner, which were mistaken for meat, but which proved to be vegetable matter.

Dr. Blake said that the specimens gathered had been carefully examined, and found to be flesh and not vegetable. A good deal of discussion ensued on this subject, but no definite explanation was arrived at. The fall covered forty acres of ground, and came out of a clear sky. The possibility of its having been a fall of fungi was rejected, as the shower was unquestionably of animal matter. Dr. Blake spoke of the difficulty of getting at correct facts on any natural phenomena, and cited the instance of a statement having been sent to him, as a member of the Earthquake Committee, of the falling of the chimney in San José. The statement, though intended to be accurate, having been quite the reverse of the truth, as was proved upon examination.

Mr. Yale had had some correspondence with the discoverer

of the skeleton of the mastodon, lately found near Petaluma; the bones, he said, were being removed and scattered, and the Academy ought to take some steps toward preserving the remains. The head has been carried away, and other portions disturbed.

Mr. Carlton remarked, that the animal was said to have been horned, but that more probably these were tusks.

Dr. Cooper said the creature was either an elephant or mastodon, and probably the tusks had been mistaken for horns.

Mr. Yale said that a similar discovery had been made last year in the vicinity of the Mission of San José.

Dr. Cooper stated that Mr. Hoffman, a member of the society, had examined one of these animals discovered in the valley of San José, and that upon being exposed to the air, the tusks had crumbled to pieces. Most of these remains had been found near the surface.

Dr. Blake stated that on Thursday night, March 11th, about 10 o'clock, a slight tremor of the earth, followed by a shock, and preceded for some minutes by a subterranean rumbling, was felt at San José; and Mr. Yale reported that a slight shock was experienced yesterday morning in this city, about ten o'clock. The shock at San José, referred to by Dr. Blake, was also felt in this city, and at Pescadero.

On motion, the Academy adjourned.

☞ *Readers of the* California Medical Gazette *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received and acknowleged under "Communications received."*

CURRENT LITERATURE OF THE MONTH.

SURGERY.

THE TORSION OF ARTERIES AS A MEANS OF ARRESTING HEMORRHAGE.

By T. Bryant, F.R.C.S.

Mr. Bryant read an important paper on this subject at a recent meeting of the Royal Medical and Chirurgical Society. He commenced by an historical sketch of the operation, dating from M. Amussat's original investigations in 1829, and then detailed a series of experiments which he (the author) had made with a view of determining the physiological effects of torsion upon bleeding arteries. Two methods of employing torsion are described—the "free" and the "limited." In "free" torsion the end of the artery is grasped by a pair of forceps and twisted freely. In "limited" torsion the end of the artery is drawn out of its sheath and grasped transversely with a pair of clasp forceps, about three-quarters of an inch from the divided extremity, while, with another pair of forceps, the free end is seized and twisted freely, as in the former method. Three or four complete revolutions of the forceps are enough for small arteries, and six or eight for large. The object of fixing the artery by the first pair of forceps is to limit the twisting of the vessel, and prevent too great separation of the artery from its vascular attachments. The following summary closed the paper:

1. That hemorrhage may, with certainty, be arrested by torsion, from even the largest vessels. 2. That it is a safe and judicious practice in all cases in which the vessels are small or of moderate calibre; and that, as far as experiments and practice yet prove, it is equally so in arteries of the first magnitude. 3. That torsion may be "free" or "limited;" the free method being applicable to vessels of moderate size, and even to the largest of the extremities, limited torsion being more adapted for the large and loosely-connected vessels. 4. That in torsion, as in the ligature, the permanent hemostatic processes are alike due to the sealing of the divided inner and middle tunics; but that in the ligature there is only an irregular division of these tunics, while in torsion there is a complete division, separation, retraction, and valvular incurvation. 5. That in torsion the twisted cellular coat forms, with the retracted and incurved middle coat, the direct mechanical obstacle to the flow of arterial blood, in the same way as the compressed cellular coat does in the ligature, but that in torsion the twisted cellular coat and incurved middle coat become subsequently a permanent means of occluding the end of the artery, while the ligature of necessity becomes subsequently a source of irritation, and, too often, a means of undoing what has been done by nature's own hemostatic processes. 6. That in torsion the twist in the cellular coat of an artery, the division and subsequent retraction, incurvation, and adhesion of the middle coat, and the coagulation of the blood in the vessel down to the first branch, are the three points upon which its temporary as well as permanent safety depends, while the permanent safety of acupressure rests upon the last point alone, and its temporary effects upon the pressure produced by the needle. 7. That there is every reason to believe that when torsion has been successful on its first application the fear of subsequent hemorrhage is altogether groundless, for there is nothing, as in the ligature, to interfere with the physiological processes set up by Nature to occlude the divided vessel, and, unlike acupressure, the temporary obstacle to the flow of blood becomes a permanent one. 8. That upon physiological grounds torsion has decided advantages over the ligature and the acupressure-needle, and that, if subsequent experience confirms what has been hitherto observed in the experiments on animals and the application of the practice in the human subject, we shall have gained a point of no mean importance, and simplified surgery in no slight degree. The paper was concluded by the author stating his belief that the practice was a safe and valuable one in many cases, if not in all; that it was not a crude idea, based upon a theory spun out of a fertile imagination, for it had its origin in observation of Nature's own processes; that it was based on the well recognized physiological principles of natural hemostatics; and that it was artificial only so far as the surgeon's art was employed in rendering these processes most available."

Dr. Humphry, of Cambridge, read a paper on the same subject at the recent meeting of the British Medical Association, of which the following is a summary:

The professor gave the results of his experience of torsion of arteries after operations, as well as the results of experiments on animals, and on the arteries of man and animals after death. For many months he has practiced torsion after all operations, including three amputations in the thigh, amputations in the leg, of the breast, excision of the knee, etc. It has answered quite well. There has been no after-hemorrhage in any of the cases; the wounds have healed more quickly, and there has been less pain, than after the ligature. The operation is rather more troublesome, and requires more care and time than the ligature. He simply seizes the end of the artery with strong forceps, and, holding the forceps in the axis of the vessels, twists till the portion included in the grasp is twisted off and the forceps are quite free. In the process of torsion, as observed upon an artery twisted after death, the thick, inner, musculo-elastic coat is first severed, often as though it had been cut by a knife or ligature. As the torsion goes on, it is so compressed or squeezed by the twisting of the outer coat that its divided edge is commonly turned up,

reflected, into the tube of the artery, to a greater or less extent, as the resistance of the outer coat is more or less prolonged, forming a valvular or funnel-like projection into the vessel. Thus there are the two things—the inversion of the inner coat and the twisting of the outer. It is upon the latter that reliance is to be placed for resistance to the flow of fluid from the vessel, inasmuch as its pressure causes and maintains the valvular inversion of the inner coat, and, further, by its own strength, offers a direct obstacle to the escape of the blood. This the professor has proved by injecting water, and connecting a column of mercury with the vessel.—*Lancet*, Aug. 15, 1868—[*New York Journal of Medicine.*

ANEURISM OF THE ARCH OF THE AORTA; REPEATED MISTAKES IN DIAGNOSIS; PUNCTURE OF THE SAC; DEATH; AUTOPSY.

Reported by N. S. Richardson, M.D., and A. M. Williams, M.D., of Macon, Missouri.

We quote this most extraordinary case of professional blundering, leaving to our readers the opportunity of forming such opinions as they may think indicated in the premises. We must, however, remark that we are well aware of the difficulty at times in making a diagnosis between abscess and aneurism, and we recall several notable instances of mistakes by most eminent surgeons. Mr. Dease, of Dublin, opened an aneurism, which he supposed to be an abscess, and killed his patient. Velpeau tied the carotid of a patient on an account of supposed aneurism, which turned out to be only a harmless, benign tumor, and his patient died from the operation; and other equally well-known cases could be given. But the onus in the case before us rests upon the fact that, so far as can be gathered from the report, no attempt at a differential diagnosis was ever made, and the management was based upon a series of false assumptions. Drs. Richardson and Williams deserve credit for reporting the case, and in so doing they seem not to have been influenced by any feelings of ill-will toward the physicians who had charge of the case, and whose names are not made public:

J. B., æt. 39; married; intemperate. One year previous to his death he fell from a horse, since which time until his death he had pain in the dorsal region of the spine. First attendance was given him by Dr. ——— for "nervous shock." Subsequently Dr. ——— treated him by mercury to ptyalism for "diseased liver." In turn, Dr. ——— pronounced the case "unimportant—not worthy of attention." Dr. A., next in charge, after an examination, declared the existence of an "anomalous tumor." On the 11th of November last Dr. A. called Dr. S., one of the former attendants of the patient, in consultation. Under the impression that the tumor, for months previous apparent, was but a common abscess, a small incision was made by Dr. A. through the integument, and a female catheter introduced. Not finding pus, a bistoury was introduced beside the catheter, and an incision three inches in length made. At the bottom of this was found a very firm clot. Scarcely a moment transpired before this was driven out, followed by a pulsating stream of blood. At this moment the truth flashed on the minds of the operators. Promptly grasping the sides of the wound and closing them firmly, they retained them in apposition by stitches, then applied a firm woolen compress and a bandage. They were thus enabled to control the hemorrhage; the amount of blood lost being probably three quarts. Supposing the aneurism to be situated on one of the smaller arteries, external to the cavity of the chest, and probably the *subscapular*, it was proposed by Dr. S. to ligate the left subclavian artery. Time passed without an operation. On the morning of November 14th the patient died. The reporters of this case were present at the *post-mortem* examination, which revealed the following condition:

On opening the thorax some injection of the pleura of the left side was observed; likewise adhesions of different degrees of firmness, and considerable serous fluid in the cavity. An aneurism of the aorta, situated on the posterior wall of the descending portion of the arch, was found, which had by pressure caused the absorption of the left side of the bodies of the third, fourth, fifth and sixth dorsal vertebræ. About four inches of the fourth rib were also entirely destroyed, with partial destruction of the third and fifth ribs of the same side. There were adhesions of the sac and pleura at the point where the bony walls of the chest had been partially destroyed.—*St. Louis Med. and Surg. Jour.*, May, 1868.

NOTES OF A CLINICAL LECTURE ON STUTTERING AND STAMMERING.

By Holmes Coote, Esq., Surgeon to St. Bartholomew's Hospital.

We are occasionally consulted on behalf of patients troubled with one of those imperfections of utterance known by the familiar names of stuttering or stammering. All persons are not aware that between these two there is a difference more marked than may be supposed, and which will be understood by a reference to the etymology of the words.

The word "stutter" is derived from an old German word—"stoten" or "stossen," to toss. The modern word is "stottern," and implies to stutter, to falter, etc. It is not confined to faults of utterance. Thus you may say, "Ein Rad das stottert," a rickety wheel; you might say equally a stuttering arm or leg, but not a stammering arm or leg.

The word "stammer" comes from "stamm" or "stem." The word "stemmen" is synonymous with "anhalten," and implies to stop in the middle of a word—to utter the root, and not the terminal syllables. It is children who "stammer," when they first begin to talk; they do not "stutter." To stammer means an interruption of words or syllables; to stutter is to falter in any way, and repeat. "Dieses Kind fangt an zu stammeln," "This child is beginning to stammer;" or "Mit stammelnder Zunge etwas zu sagen," "to say anything with a stammering tongue," means that the child says part of the word, and lolls out the rest; so that "stammeln" and "lallen" are sometimes used synonymously. To give one familiar example: a stammering child would say, "There is a-a-butter-er-er-er-fly." A stuttering person would say: "Th' th' th' at is a bu-bu-bu-butterfly." But, as I have said, you may speak of a stuttering wheel or a stuttering limb, although it is inelegant.

You will ask, what is the practical value of this knowledge? Well, you may cure stammering more frequently and more easily than stuttering. Stammering may proceed from timidity; from want of familiarity with the construction of sentences; from some temporary defect in the tongue, which will pass away with age. Hence it may be cured by patient instruction, aided by time. But stuttering implies a want of power to co-ordinate muscular action; and I fear we must seek its source (when "stuttering" is applied to speech) in the sensorium. When the word is applied to limbs or organs, we must refer to the spinal cord.

Many years ago, Professor Dieffenbach wrote a short work on stammering and stuttering, wherein he endeavored to prove that the cause of this imperfection of utterance depended on a want of control over the muscles of the tongue. He argued that the muscles were too long for their office; and that it would benefit the patient to extirpate a part, particularly a portion of the linguales and long muscles of the tongue. He accordingly cut out a wedge-shaped slice from the middle of the tongue, and then sewed the edges of the wound together. But against this operation was justly urged the double objec-

tion—first, that it was based upon a wrong principle; and secondly, that it was both severe and dangerous. And, after the occurrence of one or two unfavorable cases, it gradually fell into disuse. But a partial improvement in the patient's utterance in some cases of stammering gained for him great temporary notoriety in the matter.

A stuttering person should be told to talk slowly, and to be circumspect in the choice of words, beginning to speak with one that comes to him easily. Many stutter only when called upon to pronounce particular letters, such as "l" or "r," etc. A little practice will enable them to avoid such words, and to substitute others. By such means, the evil may be greatly diminished, but not entirely removed. Some believe that they get on better by speaking both slowly and pedantically—often, I am sorry to say, deceiving themselves very much as to the amount of improvement. But I believe that we can give no better advice than that of teaching the patient first to utter some easy word or sound, and then to speak slowly and distinctly; also, when possible, to desist from speaking until the stuttering spasm has passed away. By the study of languages, a greater command of words will be obtained, and by this a corresponding advantage of selection in the means of expression will be gained.—*British Med. Jour.*

TREATMENT OF A FRACTURED RIB.

By Dr. J. C. McMechan, Cincinnati.

In the present state of surgery it is not deemed advisable to elevate a depressed rib. Erichsen says: "Any displacement that may exist, usually remedies itself without the necessity of the surgeon interfering. If, however, a portion of the rib continues depressed, it had, I think, better be left so." The one grand object in the treatment of a fractured rib, is to prevent undue motion of the broken bone, so that the pleura or lungs may not be injured, or an inflammation set up in them. But how is this movement of the ribs to be controlled? Most surgeons have come to the conclusion, that to bandage the chest with a broad flannel roller, or to "apply a roll of adhesive plaster round the chest," are the best means of attaining this end.

One surgeon recommending the latter form of dressing says: "The plaster must be about a foot in width, and should be sufficiently long to make one and a half turns round the body. It should be applied very tightly, and may be left on for ten days or a fortnight, when it may require reapplication. It supports the chest more firmly and evenly than an ordinary bandage, affording the patient great comfort."

If there are ribs fractured on each side of the chest, we will not argue but this is the best dressing; but it seldom occurs that such a fracture takes place, it being usually confined to one side.

The fracture occurring on one side, the patient is to be placed in the sitting posture. Three strips (supposing one or two ribs to be broken) of adhesive plaster sufficiently long to reach half round the body (from the vertebra to the sternum), and two inches and a half in width, are to be prepared. The patient is to "hold his breath" whilst these strips are being applied. One is to be placed directly over the fractured rib, extending from the vertebra to the sternum, and in the same direction as the rib. The other two pieces are to be placed diagonally across this one. The first piece will have a tendency to unite the fractured ends of the rib, and the three pieces together will so compress the one side of the chest, that little movement of the ribs will take place on that side in respiration. We have tried this dressing only in one case, but found it to be much better than the roller dressing.

On August 15th, Miss G. B——, whilst taking a drive on Spring Grove Avenue, was thrown from the buggy and had two ribs broken on the left side—the sixth and seventh true ribs. On first seeing the case we applied a roller bandage, which gave the patient but little relief. On visiting her the next day we applied the dressing previously described, which gave her almost instantaneous relief from the pain felt on respiration. The fractured ribs have united nicely, and there is very little depression left, which at first was well marked. The patient was of course kept in bed during the treatment.

We claim for this the advantage, over other forms of dressings, that it relieves the pain felt on respiration more effectually, and at the same time tends to unite the fracture as well as any other dressing yet proposed.

Our remarks are based on but one case, but we ask those practitioners meeting with this form of fracture, to give the dressing described a trial at least.—*Cincinnati Lancet and Observer.*

ANTISEPTIC SURGERY.

M. Maisonneuve, of Paris, contends that it is our own fault if the results of the great operations of surgery are not favorable. He summarizes his method as follows: "Lifeless organic liquids are the only cause of the untoward state of wounds. The indications, therefore, are to prevent the death of the organic liquids, and to eliminate them when deprived of life. To fulfill the first indication, we must prevent the prolonged contact of living fluids with dead organisms, be the latter solid, liquid, or gaseous. To fulfill the second, we should eliminate dead fluids by counter-openings, irrigations, or drainage, but especially by continuous aspiration or sucking up, which last measure may advantageously replace all those above mentioned." This aspiration is carried out by means of a bag connected with a tube.

M. Jules Guérin contends that he is the author of the method, having all his life advocated subcutaneous surgery. He, however, does not, like M. Maisonneuve, pay attention to dead liquids; his object is to prevent complications by an apparatus either before or after the introduction of air, which he calls pneumatic occlusion.

Such is the difference of views and practice between those two ingenious men, who, after having worked together in this field of inquiry in a friendly manner, are now engaged in rather bitter polemics.

M. Maisonneuve states now that his method is carried out among the patients at the Hôtel Dieu, he does not see any fatal cases after amputations, compound fractures, etc. These favorable results naturally bring to mind the success which is nowadays attending Lister's method. The latter surgeon endeavors to prevent the admission of germs into wounds, and thus considers that no decomposition takes place. M. Maisonneuve prevents the death or decomposition of fluids by a sucking or aspiring apparatus; and M. Jules Guérin by pneumatic occlusion, as he calls it—*i. e.*, atmospheric compression and exclusion of air. Maisonneuve and Guérin are not so generally imitated in France as Lister is in Britain. Let the three methods abide the best of trials—viz., the trial of time.—*Lancet.*—[*Dominion Medical Journal.*

OVARIOTOMY IN ITALY.

Ovariotomy, which has now become so common an operation in this country, and to which our German and Gallic neighbors are beginning to be accustomed, is still a surgical proceeding of supreme importance in countries where it has seldom been adopted. In Italy, the operation had until now been performed eleven times only, and this accounts for the

great enthusiasm with which a twelfth case, which has just occurred at Pisa, is spoken of and commented upon in the Italian medical journals. Prof. Landi has been the venturesome surgeon who has added the twelfth operation to Italian experience of ovariotomy, and it is said that he accomplished his task beautifully. This is so much the more to be admired as it was his first attempt, and as he undertook it before a very large attendance of curious and anxious compeers. Not only all the medical officers of the hospital, but all the medical men of the town and suburbs, nay, *confrères* from Leghorn and still more remote localities, crowded round the operator to witness the performance. Things went off in the best possible manner; no unfavorable circumstances troubled the course of the operation, and a large unilocular cyst, weighing with its contents fourteen pounds, was successfully extracted. Since then the state of the patient has progressed favorably. The Italian journals are warm in their praises of the courageous lady who submitted to the operation, and of the surgeon who undertook it; and we join in their wish that an operation which has produced such excellent results elsewhere, and saved so many lives seemingly condemned to death, may prosper in the warm climes of the south.—*Lancet.*

SUBCUTANEOUS INJECTIONS IN THE RADICAL CURE OF VARICOSE VEINS.

Dr. Stephen Smith, in the *Medical Gazette*, recommends the subcutaneous injection of the persulphate of iron in this troublesome affection. The patient being in the erect position, from 5 to 15 drops of Squibb's preparation of the persulphate may be forced into the cavity of the vein by the use of the common subcutaneous syringe, the vein being pressed by the finger. In a few minutes the clot may be detected by the finger and the needle may be withdrawn. The patient should remain in bed several days and cold applications be made to the puncture. To prevent the possible escape of a clot into the general circulation, a compress and roller should be applied to the trunk of the vein on the cardiac side. The larger trunks are usually injected, and at several points of the same sitting. The clot at once perfectly occludes the vessel.—*Medical Record*, Sept. 15, 1868.

Contra-indications to the Use of Anæsthetics.—One of these, M. Gosselin observed in a recent clinical lecture, is the inveterate use of alcoholic drinks so common in the classes brought to the hospitals. In subjects of this kind who have passed their fiftieth year, anæsthetics should either be abstained from or employed with the greatest circumspection, so that the anæsthesia may not be too deep or too prolonged. Another still more important contra-indication is the state of stupor which immediately follows violent injuries. This, indeed, is self-evident; but the question arises as to how soon after the cessation of such stupor are anæsthetics admissible. After some of these great injuries, when all the known signs of such stupor have disappeared, there may be a certain amount of latent (*larvée*) stupor which may yet deceive us. This is at present a very ill-determined matter, to which M. Gosselin is desirous of drawing the attention of surgeons. Amongst the injuries in which M. Gosselin thinks that the employment of anæsthetics is unadvisable are recent dislocations, and especially those of the shoulder, in consequence of the serious lesions of important trunks of nerves which may be present. The objection does not hold good with regard to old dislocations, wherein anæsthetics are particularly indicated. —*Gazette des Hôp.*, October 31—[*Medical Times and Gazette, London.*

PRACTICE OF MEDICINE.

Dr. B. Mattocks, of St. Paul, Minne., on the climate of Minnesota, in the Boston *Journal of Chemistry*, for consumptives, says:

"According to the old theory of an inflammation existing, we should at once decide in favor of a warm, equable, moist climate. We should select the shores of the Mediterranean, Italy, south of France, perhaps Brazil, or Cuba. In our own country, the Southern States would be recommended. On the other hand, taking the present view of tuberculous disease —viewing it as a condition of impaired vitality, with all the powers of life at their lowest ebb, lifeless and dispirited— would it be safe, we ask, to send such a person to an equable climate, with nothing to cause a ripple in the waning stream of life; with no winds, rains, or storms; climate mild and pleasant all the year round?

A tonic, bracing air is now recommended for lung difficulties, a dry atmosphere, a healthy climate; such an one is Minnesota. The question is often asked, "Why is Minnesota a good climate for consumptives? What do you claim for your climate?" First, we claim that Minnesota is one of the healthiest, if not the healthiest State in the Union, all things considered. I conceive it folly to send a patient to India from England, to be cured of consumption, at the expense of a liver disease; or to the Mediterranean, to die of inflammation of the lungs; or to Cuba, or Florida, to die of cholera or yellow fever, or some disease of the bowels. The Mediterranean is a great resort for invalids; yet the natives to an alarming extent die of consumption. The same, I think, is true of the Sandwich Islands. In the city of Mexico they are to a wonderful degree free from phthisis; yet in other diseases they have an alarming mortality.

In St. Paul, Minnesota, in 1867, there were 251 deaths, of which about 50 were non-residents and accidents (by non-residents, I mean strangers who came here in the last stage of disease, but to die), leaving about 200 deaths by diseases among our citizens. The general average of death the world over is about 22 per 1,000 inhabitants. Now St. Paul has a population of 18,000, and her death-rate is 11 per 1,000 inhabitants, just one-half the average number of deaths. In the State at large, of course the death-rate would be much less. Of these deaths in St. Paul, two-thirds of them are of foreign birth, and a great part of them occurred in shanties, or rudely constructed hovels. From these two hundred deaths, seventeen died from consumption, or one in eleven. In New York and Philadelphia, the proportion is one in six or seven. Of these seventeen deaths by consumption, all but three were of foreign birth. *But three Americans, in a city of* 18,000 *inhabitants, died in* 1867 *of consumption.* Justice claims that I state these figures are but for one year, the only year of data at my command.

We are an inland State, away from large bodies of water; therefore we are not subject to marine or lake winds, with the exception of part of our northern border, where we claim no particular immunity from consumption.

Along the New England seaboard, including Vermont, which is on a lake, consumption prevails to an alarming degree. The deaths from this disease alone average one in four or five. The same holds true to a great extent along the chain of lakes in the West.

Then, too, we have no mountain ranges in our State to prevent evaporation, another fertile source of consumption.

We have a soil which easily absorbs moisture. A great portion of the State is rolling prairie, which admits of perfect drainage. The soil is light, with very little clay. Neither have we a

sandy soil, with fine particles of silex to be brought in contact with the lungs at every breath. We have little or no fever and ague. There were no deaths last year from that disease.

In the first place, we have less moisture, a lighter rain-fall, than any other State in the Union. The average rain-fall here is about twenty-five inches; of the New England States and New York, from thirty-two to forty-five inches; and owing to the irregularities of our land, it is at once drained off. We are so far north that the moisture that falls from November to the middle of March or first of April is in the form of snow, with scarcely a day of thaw in the meantime.

The transition from winter to spring is rapid. Vegetation in May is nearly two weeks in advance of Michigan, several degrees south of us. An observer of thirty years in the northern part of New York and ten years in Minnesota tells me that we have green peas two weeks in advance of New York. The river at this point was open from two to three weeks in advance of Lake Champlain this spring.

Our summers are very warm; the average mean is 70 deg., equal to the mean of States four degrees south of us. Yet as a general thing we have a cool breeze most all the time.

We pride ourselves upon our Indian summer. Our winters are cold and crispy, but as a general thing dry. I think our winter mean is no lower than that of Boston. Yet we miss those sudden changes here which chill through and through. Last winter I was walking home from a lecture with the mercury 15 deg. below zero, and as I walked rapidly I was not particularly cold. While walking over some frozen peaty soil, I recalled walking over the same road in September several years before, clad with the same wrappings precisely, yet I thought I never was so cold. Such is the difference between a winter in Minnesota and an eastern one. While one chills you through, the other stimulates to faster motion.

The question is often asked, Is not your Minnesota air too stimulating; will it not produce hemorrhage? We answer that we think not. Perhaps in some rare instances it might have that effect, but where one instance of that kind is on record, many instances are known where hemorrhages have ceased entirely upon visiting our State. My experience with consumptives is, that air is what they want, and the more it stimulates the better. Very seldom do we hear that air is too pure, too exhilarating.

ON THE INDICATIONS AND CONTRA-INDICATIONS OF THE EMPLOYMENT OF ALCOHOL IN THE TREATMENT OF PNEUMONIA.

By Dr. Pecholier, of Montpellier.

The treatment of pneumonia by alcohol has lately found considerable favor among French physicians; but they by no means advocate the indiscriminate use of this agent in all cases of pneumonia. M. Pécholier has lately endeavored to determine the question as to the indications and contra-indications of the alcoholic treatment, by a series of clinical observations made on a certain number of cases which seemed favorable to the attempt; and the summary of the results in five cases is recorded, a cure having been accomplished in each instance. From the facts observed and the theories advanced as to the properties of alcohol, especially the property it possesses of awakening the dormant remedial powers of the constitution, and that of arresting the waste of the tissues, M. Pécholier concludes that alcohol is suitable for the treatment of cases of adynamic pneumonia, such as are comprised in the following categories:—1. In habitual drunkards, in whom the disease assumes an entirely special character, and in whom the beneficial effects of the alcoholic treatment have long been recognized. 2. In cases where the pneumonia presents itself under special characters, whether dependent on the *etiology*, as the adynamic medical constitution, the spring or autumn season, old age and weakness, enfeebled constitution, etc., or in relation to *local symptoms*, as in latent pneumonia, where the rational signs are wanting, or even the physical signs are slow in manifesting themselves, or in cases marked by *general symptoms*, as prostration, dorsal decubitus, coma, delirium, pale face, pulse rather slow, or too frequent but very compressible, weak action of the heart, etc. 3. Where the disease, although sthenic at the beginning, has changed its character, and presents symptoms of adynamia, whatever may be the cause of the change, the peculiar nature of the affection, the abuse of bleeding, and other dépleting measures, etc. 4. In many cases of double pneumonia, especially when the second lung is attacked, a certain number of days after the first, and when the patient has been weakened by the treatment of the primitive lesion. 5. In the pneumonia of the aged. 6. In secondary cases of pneumonia, which supervene in the course of other febrile diseases. 7, and lastly. In all cases, whatever may be the age of the patient, or the season, or the climate, when an attentive analysis of the symptoms, the state of the pulse, or that of the functions of innervation, shows that the pneumonia is really asthenic. The contra-indications of alcoholic remedies in pneumonia are easily deduced from the above considerations. The principal of them are the winter season and dry cold, the youth and vigor of the patient, a full and hard pulse, a red and injected face, or, in a word, when the symptoms are characteristic of the condition known as *inflammatory fever*. A very red and dry tongue, and a painful condition of the epigastrium, may also be regarded as contra-indications, even in adynamic cases. The editors of the *Bulletin*, in quoting M. Pécholier's views, agree with him that the doses of the alcoholic fluid should be proportionate to the severity of the case and the peculiarities of the constitution; and they further observe that the doses should be so divided as never to produce too great an excitement, which may be followed by depression; and that the remedy should never be too quickly stopped when it has produced its effects, but should be given for some days longer in decreasing doses.—*Montpellier Médical, reviewed in the Bulletin Général de Therapeutique*, May 15, 1868—[*Lancet and Observer*.

ON CHROMIC ACID IN CUTANEOUS DISEASES.

By H. S. Purdon, M.D., etc.

The chemical composition of this acid is $C_r O_3$. It is exceedingly soluble, deeply penetrating, and cannot be brought into contact with organic matter, from the remarkable readiness with which the latter deprives it of half its oxygen. Chromic acid is a powerful caustic, having a slow and gradua action. Drs. Ure and Sigmund have used it successfully in the treatment of cancer. It may be employed either in substance, sprinkled on the diseased part, or in solution, and its application is not followed by much reaction.

The class of diseases in which this remedy is of most service are the dermatophyta. In tinea circinata I have used it largely in solution, usually one drachm of the acid to one ounce of water, one application of which is sufficient for curing the complaint. In other vegetable parasitic diseases, this acid will be found equally useful, as in tinea tonsurans, sycosis, etc.

In condylomata, chromic acid has been largely employed by Continental surgeons; and, after giving it a fair trial and contrasting it with other caustics, as nitric acid, terchloride of antimony, etc., I prefer it as a more rapid and less painful remedy. The solution I use is of the strength of two drachms to the ounce of water.

In four cases of lupus admitted at the Belfast Dispensary

for Diseases of the Skin, chromic acid was the remedy employed either in substance or solution (two drachms to the ounce). I prefer the latter, as it is more easily managed. This remedy appears to exert a specific action on tubercle. Indeed, in lupus I consider constitutional remedies, with the exception of cod-liver oil—and that more as a dietetic agent—useless. The patients being generally strong, and, with the exception of the complaint under which they labor, in good health—consequently it is to local applications we must look for curing the complaint; and I have come to this conclusion after having closely watched some fifty or sixty cases of this disease.—*Journal of Cutaneous Medicine and Diseases of the Skin*, April, 1868.

PREVENTION OF CONTAGIOUS DISEASES.

Sir Patrick Grant, the Governor of Malta, gives most valuable information respecting the effect of sanitary restrictions in that island, in an official letter to the Home Government, obtained at the request of Mr. Berkeley Hill, Honorary Secretary to the Association for the Prevention of Contagious Diseases. His Excellency reports that, up to 1861, much contagious disease prevailed among the troops at Malta. An ordinance was passed in that year to check it, which occasioned "an immediate diminution of these diseases to almost an unprecedented extent; and it has continued so up to the present time" (July, 1868). Sir P. Grant is convinced "that large or small bodies of men should be personally examined before being granted access to an isolated community, and he will enforce a strict adherence to this well advised principle." The essential conditions of the ordinance of 1861 are: 1. Regular examination twice monthly, with the power of examining any person complained of. 2. The detention of the diseased while liable to communicate their disorder. The yearly average in Malta is about 100; and the examining physicians have remarked that some women are repeatedly sent to hospital, while others remain constantly healthy. The number of cases of disease, not individuals—for as before said, oftentimes the same woman is admitted over and over again—has steadily decreased; in 1861 it was 85; in 1867 it was only 32. Corresponding diminution has attended the admissions for contagious disease among the troops. Mr. Inspector General Paynter says that in 1860, before the regulations were enforced, 916 men were sent to hospital; in 1867 the number dropped to 689; and in 1862, when the regulations had been enforced a year, the number fell to 340. To the present time, the annual number has been constantly under 300; this includes, also, an average of 50 men who are diseased before they land from England. The average strength of the garrison is over 5,000 men, and many strangers call at the island in the course of the year. A few English camp-women who follow the regiments, manage to evade the regulations, from whom much of the disease which still remains is spread. In the navy, the results of sanitary restrictions are still more complete, as sailors, being comparative strangers, cannot evade the regulations in the way the soldiers do. The average naval force in port at Malta is 3,800, and the number of men who land in the year reaches 8,000; but Dr. Domville reports that, during the last two years, only six cases of disease contracted on the island have been admitted into the naval hospital.—*British Medical Journal.*

Dr. Montgomery, of St. Louis, in speaking of the advantages of enemata, in hepatic colic, or passage of biliary calculi, says:

"I am opposed to opiates because I think they protract the case, and leave the patient in a weak and dyspeptic condition afterwards; and in my experience, I believe I can give my patient as much relief, and that of a more permanent and prospective character, by the tartar emetic and belladonna, and the frequent and copious injections. When I first essayed the use of *enemata* in this disease, I was not prepared for the very happy effect which resulted from them; and when given as I have directed, the sufferer will be very apt to request a repetition of them. If the patient is robust, I use the common glauber salts, but if a female or rather asthenic, I prefer the phosphate of soda; but in either case, to secure the prompt relief desired, we must use them as warm as can be comfortably borne, and they must be thrown up with some force and in large quantity. The prolonged use of the warm bath, and the hot fomentations to the hyponchondriac and epigastric regions are also most excellent adjuvants to the treatment. As it is a great desideratum to prevent the recurrence of the attacks in those susceptible to them, Dr. Buckler's suggestions—the use of the succinic acid and peroxide of iron as a prophylactic—may be worthy of further trial, in conjunction with suitable diet, regular exercise, etc.; but as the succinic acid and iron did not seem to agree well with my patient, I am now giving him the *potassæ cloras* after each meal, with the same object in view."—*Medical Archives.*

Treatment of Diseases of the Heart.—Dr. S. O. Habershon, Physician to Guy's Hospital (Guy's Hospital Reports, 1867), lays down seven principles of treatment for diseases of the heart: 1st. To lessen its work; 2d. To insure regularity of action in avoiding all excitement; 3d. To lessen the distention of the right heart by purgatives, diuretics, etc.; 4th. To prevent syncope attendant upon exhaustion; 5th. To strengthen the fibres of the heart by suitable out-door exercise; 6th. To prevent fibrillation of the blood by suitable remedies—for instance, carbonate of ammonia; and, 7th. To prevent secondary complications, such as pneumonia, pleuritic effusion, etc.

PHYSIOLOGY.

NERVES OF THE NEURILEMMA.

At a recent meeting of the Academy of Sciences, Paris, Prof. Robin presented an important communication from M. Sappey. M. Sappey's Memoir bears on the discovery of certain nervous filaments which have the same relation towards the nerves as have the vasa vasorum towards the vessels. But, through the novelty and great interest of this paper, we believe it well worth while to translate a few of its principal passages.

"The neurilemma receives nervous filaments, which are in the same relation towards the nerves as the vasa vasorum towards the vessels; I therefore propose that they should be designated by the name of *nervi nervorum*. Their existence in the fibrous sheath of nerves had not yet been signalized; yet it is undeniable, and may be easily demonstrated.

The disposition which the *nervi nervorum* effect in the neurilemma differs in but a slight degree from the one presented by the nervous ramifications in the other dependencies of the fibrous system. Like these, they generally attend the arteries; in like manner they exchange, during their course, numerous divisions, by which anastomoses are effected, so that on different points of their situation a small plexus may be observed, showing irregular and unequal meshes.

It is not only on the principal or common sheath that they are met with, but likewise on those which involve the principal fasciculi and the tertiary fasciculi. I have been able to trace them even on the sheath of secondary fasciculi. But in pro-

portion as the size of the sheath diminishes, they become far more minute, and are much seldomer met with. They are never seen to extend to the involving membrane of primitive fasciculi.

The absence of the *nervi nervorum* on the sheath of primitive fasciculi explains why they are not met with on all nervous divisions the diameter of which does not exceed one millimetre.

The lining or profound membrane of the optic nerve, which fulfills the office of a neurilemma, does not receive any nervous filament. The exterior membrane, on the contrary, receives a great number of filaments, which take their origin in the ciliary nerves."

PATHOLOGY.

THE CRUCIAL TEST IN REGARD TO THE ORIGIN OF PHTHISIS AND TUBERCLE.

By Henry MacCormac, M.D., Belfast.

The old alchemists were in the habit of impressing their bocals and their pots with a cross of *crux*—hence crucible—hoping thereby to propitiate the higher powers and realize favorable issues; and hence, also, the adjective "crucial," as applied to any test calculated to throw conclusive light on a given subject of inquiry. It is sometimes expedient to enter into special experimental inquiries, in order to realize the crucial test. At other times, we find the crucial test displayed, as it were, obviously before us, and needing only to be heeded, in order to be turned to avail.

I believe, and assume to show, that we have this crucial test at hand in respect of the production of tubercle. For, although tubercle may be expressly produced in the lower animals by forcing them to respire habitually air already respired, we find by the observation of facts—facts of every-day occurrence—facts lying before us—that tubercle is so induced in man and animals by reason of the habits, voluntary or constrained, which lead them habitually to respire air in part, at least, already breathed, instead of air no portion of which has been before respired.

My position is—the position which I take up—that tubercle is alone induced by the respiration of air in part already breathed; for air, all of which has been breathed before, is irrespirable, wholly, and, in fact, productive of immediate death. My averment is, that tubercle, with the diseases which tubercle is known to induce, is alone caused by air already breathed, in such wise that, if air already breathed in part be breathed habitually, tubercle is inevitable; and, secondly, that if no part of the air breathed have been breathed before, tubercle is impossible.

The notion of hereditary or inoculable tubercle I hold to be quite illusory. Tubercle is not inherited, though tubercle may be induced in the fœtus *in utero* by the same causes which induce it in the mother. And, *à fortiori*, if tubercle be not hereditary, none of the diseases which tubercle induces—to wit, phthisis pulmonalis, tabes mesenterica, white swelling, scrofula, and hydrocephalus, so far as hydrocephalus depends on tubercle—are hereditary.

That this must be so is obvious, seeing that the production of tubercle is a chemico-vital process, and not producible otherwise. For what is tubercle? It is no other than the retrograde or effete carbon of degradation, the waste particles which, having discharged the purposes of life, and not being oxidized and converted into carbonic acid, are retained in the organism, and, with whatever foreign matters, water, fat, or cretaceous particles, oftentimes load the pulmonary and other tissues, to their destruction. If the effete carbon be burnt off, there is no tubercle possible. If the effete carbon be not burnt off, tubercle, sooner or later, is unavoidable.

When the natural atmosphere is but once respired, it becomes loaded with about 4 per cent. of carbonic acid, not to speak of water and certain other effeté matters, the result of the oxidation of the waste carbon. This, to the extent mentioned, replaces the natural 21 per cent. of oxygen; and, though it might be supposed that air, as thus, contained enough remaining oxygen to supply respiration, it is found in reality to prove quite otherwise. Air loaded with 4 per cent. of carbonic acid, the result of respiration, being breathed, produces almost immediate death. We do not know the exact quantity of carbonic acid which, being habitually present, is adequate to induce tubercle; but I assume that from 1 to 2 per cent. is, in the main, amply sufficient. The presence of carbonic acid, in any degree in excess of the minute quantity supplied by the hand of nature, is hurtful and reprehensible. But the above proportion of carbonic acid—at any rate, the air containing it—being habitually respired, will suffice to occasion tubercle.

We cannot, and we would not if we could, subject human beings to the conditions productive, and, as I allege, alone productive, of tubercle. But human beings do so of their own accord, or constrained by circumstances; and we find, I aver, the results flowing from this use and wont just as conclusive, in respect of the production of tubercle, as if it were the result of an intentional experiment. It has, I conceive, all the force and relevancy of an *instantia crucis*, or designed crucial test or experiment; with this difference, that in the one case the result is undesigned, and in the other designed. One, then, inferentially, must be just as conclusive as the other; unless, indeed, we can venture to affirm that observation, *cæteris paribus*, or other conditions being equal, cannot compare with experiment. And yet, after all, what is experiment but tentative observation? In point of fact, experience and experiment, in essentials, are one and the same.

The habit of sleeping with closed doors and windows loads the sleeping-chamber atmosphere more or less with the products of respiration, and tends to induce tubercle in the inmates. If the day-life be spent in active open-air pursuits, the tendency to tubercular development may be so slow as not appreciably to affect the duration of life. It is quite otherwise, however, when the day and night life combine to occasion the habitual respiration of air more or less prerespired at all times. It is then that the immense preponderance of tubercle takes place, to the production of the ravages which more than decimate the population. Indeed, I have come to the conclusion that tubercular deposits subsist in half the population at the period of disease, if, as Rokitansky affirms, they do not actually subsist, more or less, in all persons at death.

The period in which tubercle ensues—the individual being constrained to breathe his own aerial excretions, or those of other persons and his own combined—varies according to the intensity of the deterioration by night, and the habits, as more or less active, more or less open-air habits, by day. In some cases, tubercles will take long years ere they lead to destructive issues; in others, months will suffice to induce serious deposits, or to render deposits already laid down fatal.

All breathing animals are subject to the law, as here laid down, of tubercle-deposit. There is no immunity, the circumstances being otherwise productive of tubercle. The most powerful and vigorous constitution *per se* will yield no exemption, if prerespired air be only adequately respired. On the other hand, the most weak and debilitated person will not incur tubercle, if only the conditions already named as alone productive of tubercle do not subsist. No animal escapes, no

climate lends safety, if air untainted by the products of respiration be not habitually breathed.

The averment that there are men and animals who can breathe, by night or by day, a tainted atmosphere—to wit: an atmosphere tainted by the products of respiration—and yet escape the deposit of tubercle, is perfectly untrue. Equally untrue is it that individuals, men and animals have escaped tubercle, and yet have breathed habitually air loaded with the products of respiration. It is untrue that the Esquimaux or the Icelanders are exempt from tubercle. That this is so, I was informed in the one case by the late Mr. Simpson, surgeon to the *Plover* exploring ship; in the other, we are instructed by the writings of Schleisner, the Dane, to which I was once referred by a writer in the *Westminster Review* for the very opposite. The inhabitants of Iceland, indeed, otherwise, and occasionally mountain-bred sheep, display pulmonary cysticerci; but cysticerci are not tubercles.

Tubercles are very prevalent in Russia, as well as throughout all Europe. They are found in the warm climates of the East; they subsist all over the Americas; they are wide-spread in the Canadas, in the United States, and among the inhabitants of the West India Islands. They are not wanting in Africa. They are found everywhere, that law of nature being violated which prescribes that the same air, no part of it, shall be respired a second time. For, if pure air be respired habitually, tubercle cannot ensue; but, if the air be impure, in the sense of being loaded with the products of respiration, and as thus respired habitually, tubercle must and does invariably form. It was observed in the diggings in Australia—at Bendigo, I believe, where eighty thousand persons were congregated together, persons who mainly slept and lived in the open air—that there was no consumption; whereas in the Australian towns, even, the malady was not absent. Sailors, soldiers, picked men, but sleeping in places loaded with the products of respiration, become tuberculous to an alarming extent—to an extent, indeed, far in excess of that subsisting amid the ordinary civil population, where tuberculosis is already only too prevalent. The French shepherds, who live all day long in the open air, are nevertheless tuberculous, by reason of sleeping in caravans or wagons, from which every breath of air is excluded sedulously. In New Zealand, the unwitting natives built houses to resemble those of Europeans; but, being constructed without any provision for the admission of air by night, the poor people are ravaged by phthisis accordingly. Nor does there seem any one willing or able to inform them of their error.

The Bédouins, who live all day in the open air, and sleep in tents where ventilation is provided for, are entirely exempt, it is said, from phthisis. The crowning instance, however, of perfect exemption from tubercle, is furnished by the inhabitants of Argyle and the Western Hebrides: here there is no consumption at all, and yet all the alleged influences ordinarily assumed to be productive of the malady are extant. Here, then, is a population extending through a number of islands, some with thousands of inhabitants, and along a line of coast of many miles in length, where there is not any consumption whatever, unless it may be a casual instance brought thither from some other quarter. The rest of Scotland is desolated by consumption, but not the Hebrides. The circumstance is vouched for by common report; by Dr. Martin, the Inspector General for Scotland, if that be his title; and by Dr. Morgan, an English physician who lived seven years in Raasay, one of the Hebrides, and who published an interesting paper on the subject in the *Medico-Chirurgical and Foreign Review*. These fortunate Hebrideans live, in fact, in houses so constructed as to be permeated by a ceaseless interchange of air—that is to say, of the house air with the outer air—by reason of having a constant hearth-fire and a hole in the roof. Thus it happens that the air is never, day or night, winter or summer, for a moment stationary; and thus, too, it is that the inhabitants never re-breathe, or possibly can re-breathe, their own pulmonary excretions. The effete carbon is constantly burnt off. There is no tubercle and no consumption: consequently the *instantia crucis* which I set out with, I submit, is furnished in its fullest force and integrity.—*British Medical Journal.*

Chlorosis.—Dr. Hammond, in the *Psychological Journal*, for July, 1868, makes the novel statement, and brings forward cases to prove the same, that chlorosis, heretofore regarded a blood disease, is primarily and essentially a nervous one. He is not entirely certain as to the exact seat of the disease, but believes it to be the sympathetic system of nerves. The changes sometimes occurring in the blood are the result but not essentially the disease. Moral and mental emotion, and a sedentary life, are the causes; not confined to the female. He presents four cases, having made analysis of the blood in all. In three there was no deviation from the healthy standard, there being present a sufficient quantity of red and no increase of white corpuscles. In all of these cases *iron* failed to make any impression on the disease; an increase of red corpuscles took place from its use in the one case in which they were defective, but without any improvement in the patient's condition.

Dr. Hammond's treatment is arsenic and strychnia (ten drops of Fowler, and one-thirtieth grain of strychnia ter die), with good results.—*Cincinnati Lancet and Observer.*

OBSTETRICS.

CLINICAL LECTURE ON UTERINE LAMENESS.

Delivered in University College Hospital, by Graily Hewitt, M.D., F.R.C.P., Professor of Midwifery in University College.

Gentlemen—As science advances, new terms and new expressions are frequently necessary, either to attract attention to certain important facts or doctrines, or to represent ideas which require embodiment and a more exact symbolization; and if I now adopt a somewhat new term, and discuss with you what I propose to term "uterine lameness," it is with the belief that the adoption of the term will serve a useful purpose.

The word "lameness," as ordinarily used, implies a crippling, or feebleness, or paralysis of one of the lower extremities; and, in a wider sense, to convey the idea of weakness, as when we speak of a "lame excuse," a "lame argument," etc. I now, however, propose to use the word in an ordinary sense. "Uterine lameness" I define to be interference with locomotion, difficulty or pain in standing or walking, in various degrees, due to an abnormal condition of the uterus.

It is well known that inflammations of the abdominal viscera, in their acute stage, often render it physically impossible for the patient to walk at all; even passive motion of the legs gives the sufferer from peritonitis the acutest pain. In cystitis, in the acute stage of pelvic cellulitis, and in many other conditions, instances of which will readily occur to you, locomotion is difficult or extremely painful, and therefore, in one sense of the word, impossible; but not because the muscles of the legs are paralyzed. There is lameness; but the power of locomotion is really unimpaired.

It is my object, on the present occasion, to direct your attention to a very interesting class of cases, in which the uterus is answerable for the lameness or the inability to walk which

afflicts the patient, and in which this incapacity for exertion—"lameness," as I have termed it—is a very noticeable, though by no means the only noteworthy feature, of the case. In the out-patient room of this hospital, the number of cases in which this uterine lameness, in one form or other, presents itself, is remarkable; and it is to me astonishing that this very grave and troublesome symptom has not received more special attention. In private practice, it is exceedingly common also.

Some forms of uterine lameness are obvious and unmistakable enough. Such are cases in which the uterus is prolapsed, and forms a tumor altogether external to the vulva, hanging down between the thighs, and rendering locomotion, of course, painful and well nigh impossible. These are not, however, the particular cases to which I now desire to refer. In the cases which will now engage our attention, the uterus is within the pelvis, and the "lameness" is produced in another way. The following is a typical case of one of these forms of uterine lameness:

I saw quite recently, in consultation with Dr. Macaldin, a single lady, aged 35, a governess by profession. For several years past she has been an invalid; for, though looking stout and well otherwise, she has been unable to walk more than a few steps without producing great discomfort. Frequently she is obliged to leave the dinner-table and recline, owing to pain produced by the erect posture; and for a long time she has been quite unable to follow her occupation. The sensation of discomfort on exertion is, in fact, so extreme as to preclude active motion. Believing the uterus in fault, Dr. Macaldin requested me to examine her. It was found anteflexed, very low down in the pelvis, and the fundus pressing forwards and downwards to an extreme degree.

In this case, the upright posture, increasing still further the dislocation of the uterus, gave rise to more pain. It is not difficult to understand why this dislocation of the uterus should give pain, the whole relations of the organ being altered, and the uterus itself the seat of flexion. Such a position of the uterus I have always found associated with pain on locomotion, varying in degree in different cases, with uterine lameness, in fact. I have had under my observation, at various times, a very large number of cases in which the disorder of which the foregoing case is a type existed, and invariably evincing the same relation as regards cause and effect. Frequently, anteflexion exists without much anteversion; and, when this is the case, a cursory examination reveals little, the os uteri being nearly in its proper place. But, in such cases, the body of the uterus is readily felt through the anterior vaginal wall by means of the finger; and a further examination reveals the true nature of the case. Trifling anteversion is a natural condition; but what I am now speaking of is something far beyond this in degree. The flexion is often greater than in the particular case above related.

An extreme degree of uterine lameness was present in the following case, associated with anteversion of a marked form:

A young lady, aged 24, from the west of England, was sent to me by my friend Professor Wilson Fox. She had been ill for a year and a half, suffering from almost constant pain in the back and in the inguinal regions. Locomotion was productive of great aggravation of this pain. It appeared that previously to the commencement of this illness, she had been much occupied in nursing a sick relative; and, in doing so, underwent much exertion. The uterus in this case was found completely anteverted, the organ lying parallel with the vagina, and the os uteri so high up that it was very difficult to reach it with the finger. The general health was much affected and the whole system shaken and weakened. Insomnia, frequent nausea, and general want of appetite, were also noteworthy symptoms.

Many other cases of a similar nature to the two foregoing have been under my care, but time does not admit of their enumeration. Of this form of uterine lameness we have frequent instances in the out-patient department; and not uncommonly, as you have seen, the condition of the uterus is foretold from the symptoms. The lameness associated with anteflexion or anteversion is by no means the only symptom, but it is a very constant one. Dysmenorrhea, menorrhagia, tendency to abortion, sterility—these are symptoms more or less frequently observed also; but, in the worst cases, the "lameness" is certainly the most prominent and troublesome symptom.

In the foregoing remarks, I have alluded to a class of cases which is the more important, as I believe they are in practice frequently overlooked, and the symptoms misinterpreted; the cases being regarded as instances of weakness, or hysteria, or chronic inflammation of the uterus. This vagueness of nosology must, however, give place to more rational and definite views on the subject. Anteflexion and anteversion of the uterus are not uncommon, and they are capable of occasioning long-continued and most troublesome suffering. I say nothing at this moment of the "weakness" which may lead to these displacements, not because I think nothing of it, but because I do not in practice find that the symptoms I have described exist unassociated with what I regard as the effect of the weakness, viz., the displacement. A relaxed, subinflammatory, enlarged condition of the uterus, often, and it may be always, precedes and predisposes to the displacement; but it is the displacement which occasions the pain, and gives rise to the lameness.

I propose, in the next place, to call your attention to another class of cases in which uterine lameness exists. These are cases in which the uterus is flexed *backwards*, and the fundus is to be felt behind the upper part of the vagina. Here the lameness is, as a rule, more decided, and more constant, and more intense, than in the case of anteflexion; and this is not difficult of explanation, when we reflect that anatomically, as Dr. Savage well points out, the fundus of the uterus can be dislocated further in the backward than in the anterior direction. The lameness in marked cases of retroflexion is of the most intense degree; the slightest motion gives pain; walking is not impossible, but so painful that it is practically given up; and this state of things may go on for years unrelieved, and, indeed, increasing in severity, if the proper remedies are not had recourse to. The symptoms are not always so intense, but they are generally of the same kind. I have generally observed that the pain spoken of extends down the back of the thighs, and more so on one side than on the other, in this form of uterine lameness; and, indeed, sometimes it is altogether limited to this one position. Motion on level ground is often tolerated to a certain degree, but walking up or down stairs gives intolerable pain. In certain cases (of which my friend Professor Priestley mentioned an interesting case at a recent meeting of the Obstetrical Society), there arises, after a time, paraplegia; the muscles of the legs lose their power, and the patient is not only unwilling, but unable, to walk. Here the paraplegia is probably a reflex phenomenon, but it may be connected with persistent disuse of the muscles.

Let me cite one or two cases as types of this form of uterine lameness:

A young lady, aged 22, whom I saw with Mr. E. Baker, some time since, unaccustomed to pedestrian exercise, took certain long walks in a mountainous district. She returned

home ill, and became gradually unable to walk without severe pain. When I saw her she had been confined to her couch for some months. The uterus was found to be retroflexed.

A very similar case: A young lady, single, the daughter of a clergyman, consulted me for lameness. She was unable to walk without assistance, owing to extreme pain in the left inguinal region, and extending down the left thigh. The lameness had been increasing in severity of late; but she had been unable to walk without pain for a year previous to my seeing her. I found the uterus retroflexed, and bent a little to the left side, so that the fundus was inclined towards the great sacro-sciatic notch in the left side. The uterus and adjacent parts were in an exceedingly tender condition. Inquiry elicited the fact that, thirteen months ago, while traveling in a railway-carriage, an accident occurred, and the carriage she was in was "turned up on end." A severe shake was the only apparent result; but within a month afterwards, she became gradually very ill, and the pain above described commenced.

I have seen a few other cases of a similar nature where acute retroflexion had been evidently produced by a severe strain, or other mechanical cause, in young unmarried women; the interference with locomotion being the most noticeable symptom.

But uterine lameness from retroflexion of the uterus is most frequently witnessed in married women: pregnancy and the process of parturition, involving as it does considerable enlargement of the uterus, predisposes most powerfully to the occurrence of this displacement and distortion of the organ. Hardly a day passes, but we see, in the out-patients' room of this hospital, cases of this nature. Undue exertion too soon after labor is the most common exciting cause; but it may arise in a variety of ways. Chronic suffering, of which inaptitude for exertion of any kind forms a very considerable element, is witnessed in these cases. That the lameness is the result of the displacement is incontestably proved by the fact that the power of locomotion is always increased by restoring the uterus to its proper shape. In recent cases, the restoration in this respect is complete; but, in more chronic cases, the cure is more difficult, and the lameness more gradually disappears. These chronic cases of retroflexion are generally associated with an exceedingly tender condition of the fundus uteri, which can be felt by the finger behind the vagina, and the whole organ is in a state of congestion, or, as it may be termed, chronic inflammation. I am in the habit of terming this condition of the uterus in some of these cases one of "strangulation;" and such, indeed, it is, for the flexion of the organ may be so sharp and acute, that the circulation in the body or fundus of the uterus is materially obstructed; the effect being such as would be produced by placing a ligature round the uterus at its middle part. This it is which, in my opinion, gives rise to that extremely sensitive, tender condition of the fundus. It is certainly the fact, also, that the tenderness is very generally limited to the fundus, the os uteri being mostly painless to the touch. I have been very much assailed on account of a doctrine I have lately broached, that Dr. Gooch had these cases of retroflexion under his observation when he was describing what he termed the "irritable uterus." Such, however, I am convinced, is the fact; and for me the "irritable uterus" means retroflexion of the organ. The inability to move about was a prominent feature of the cases alluded to by Dr. Gooch, and it is certainly the most prominent one in cases of uterine retroflexion.

There are other conditions of the uterus which may occasion lameness, and which must next be alluded to. In the foregoing cases, the uterus has been supposed to be altered as regards its shape by what may be termed an intrinsic cause. But we now and then find the uterus pulled over in this or that direction by the presence of fibroid growths. Thus, a fibroid tumor growing in the outer part of the wall of the uterus, on its anterior or posterior aspect, will have the effect of inclining the organ in one or the other direction, and thus there may ensue impairment of locomotive power. It is the result of my observation, however, that, unless the uterus be at the same time considerably bent, the discomfort due to these tumors, so far as locomotion is concerned, is ordinarily comparatively trifling.

It would be foreign to my object on the present occasion to consider how the various ailments above described are to be cured. That will form matter for consideration on a future occasion. My desire at this moment is, to impress upon you what has forced itself on me as a wide and comprehensive and true conclusion in regard to uterine disorders, that, when you meet with a case in which there is impairment of locomotive power, associated with uterine symptoms, the probability is very strong that, on careful examination, decided flexion and mechanical distortion of the uterus will be found to exist. Let it not be supposed for a moment, that I deny the presence in many of such cases of other, and it may be important, changes in the state of the uterus, aggravating and increasing, as they often do, the original mischief; but my experience has taught me that they are, for the most part, secondary, not only in effect, but in importance. And it is, I believe, substantially true that, in nine cases out of ten, "uterine lameness" is due to flexion and analogous displacements of the organ.

Lastly, I would not have it supposed that I disregard the ovary in regard to the question of lameness. I have met with several cases in which difficulty in locomotion was connected with ovaritis in various forms and degrees; but, compared with uterine lameness, ovarian lameness is, I believe, comparatively rare.—*British.*

THERAPEUTICS.

ON THE EMPLOYMENT OF GLYCERINE OF TANNIN.

By Sidney Ringer, M.D., Professor of Therapeutics in University College, London.

The writer is induced to make a few remarks on the employment of this preparation of tannin, as it appears to be but little known, and of course but little used, while in his opinion, it proves of great service in many diseases. He thinks it will be found of great use in ozæna. It not uncommonly happens after measles, or scarlet fever, or other diseases, for the inside of the nose to be excoriated, rather reddened, and to discharge freely a thin sanious, or thicker purulent fluid, which latter, on drying, blocks and scabs up the orifices of the nose; while, often at the same time, from the irritation of the discharge, the upper lip is covered with eczema. If the inside of the nose be well brushed out with glycerine of tannin, the discharge of either kind ceases, often, indeed, after a single application, and the parts heal and become natural again. If the scabs be thick and the orifices blocked up, these crusts must be thoroughly removed, so that the excoriated surface is left bare, which permits the preparation of glycerine to come well in contact with the sore secreting surface.

The obstruction which so generally occurs in the nose of syphilitic children, and which causes in them the characteristic snuffling, may be removed by this treatment. After the application the child breathes much freer through the nose, and then can take the breast much more easily. For while

the nose is blocked up the child cannot suck and at the same time take air into the lungs through the mouth, and so it constantly happens with syphilitic children that they cannot suck properly, in consequence of which they waste away.

Patients constantly apply for relief, who suffer from a chronic discharge from the nose of a thick, lumpy, greenish-black matter, which may continue for years, and which not unfrequently has a most disagreeable smell. Such chronic discharges can very generally be speedily removed by this application; and even if it continues in spite of this treatment, the offensiveness of the smell is always destroyed. It is necessary that the cavity of the nose should be thoroughly washed out with the preparation.

The treatment is sometimes successful where alum and other injections and washes have failed to affect the disease.

The thin sanious or purulent discharge from the ears so commonly met with in weak, unhealthy children, especially after they have suffered from a severe illness, can be stopped at once by filling up the external meatus with this liquid preparation of tannin. Usually one application is sufficient, but a slight discharge may remain, or it may return again in a few weeks, when it can be again removed by a fresh recourse to the glycerine of tannin. If there be acute inflammation of the meatus, it need scarcely be said this treatment is inapplicable until the acute affection has subsided and become chronic. The chronic vaginitis of children, with thick purulent discharge, can often be at once arrested, by painting the affected parts with this application; it however not unfrequently proves more obstinate than either of the previously mentioned diseases.

This preparation is also of very great use in many cases of eczema. It is of service only in the earlier stages of the disease. Thus, when the skin is inflamed, red, swollen, and weeping, if the scabs be thoroughly removed, and the raw surface be painted over with this preparation of tannin, the discharge is stayed, the redness, heat, and swelling much lessened or removed, and the appearance of the parts much improved. When in a less active condition, and when the tissues are less red, swollen, and weeping, the eczema may more profitably be treated in the same way. The tissues assume a much healthier appearance, and after a few applications look like a healthy, healing sore. A poultice may be usefully applied at night, and this glycerine of tannin twice or three times in the day. All the advantages which accrue from its employment in this disease have not yet been mentioned, for the troublesome itching, and tingling, and burning so common in eczema, are at once removed by this application, and thus the tearing with the nails and rubbing with the hands which prevents the healing of the sore, and causes it even to spread, is prevented, and the comfort and well-doing of the patient much promoted, as the itching and feeling of burning often greatly break the sleep. Sometimes the glycerine of tannin does not, of itself, quite remove the disease, but brings it to the stage where there is only a little desquamation, with a tendency to crack and ooze. It may be necessary in such case to perfect the cure by a resort to tar or carbolic acid ointment. It need not be said that some cases prove incurable by this as by all other treatment. Impetigo may be beneficially treated in the same way. The scabs should be removed by a poultice applied each night, while this tannin preparation is employed during the day. In the treatment of these diseases of the skin by this application, the state of the digestive organs must not be overlooked, but anything wrong with them should, if possible, be removed.

The eczema which occurs behind the ears of children, and is often limited to these places, is most admirably treated with the remedy. It almost always dries up and heals after one or two applications, even when it has lasted for weeks or months. The gums, if red and swollen, should be lanced, or other irritations removed. Intertrigo of children may also be treated in this way.

It is an extremely useful application to the throat for a variety of purposes. It may be employed with great benefit to the throat when an acute inflammation has just subsided, as the mucous membrane becomes less red, less swollen, and moister, and is covered with mucus or pus. If the glycerine of tannin be then painted on the pharynx, &c., the recovery to their natural state is much hastened, and the chronic inflammation, with a relaxed condition of the mucous membrane, which sometimes follows the acute disease, is prevented. The superficial ulceration which may occur just as the acute conditions are subsiding, may be speedily healed by this application.

In chronic inflammation of the throat, when the mucous membrane is relaxed, moist, and granular-looking, or bathed with mucus or pus, the tissues may be speedily braced up, and these conditions removed, by a few applications of the preparation of which we are speaking, while the hoarseness which may accompany it is at the same time much lessened or removed. Such a throat is commonly met with in children, and is a cause in them of a frequent hacking cough, which may keep them awake for the greater part of the night. A speedy way to cure such a cough is to wash the throat with this astringent application.

Such a state of throat frequently causes slight deafness, a circumstance very common with children, and which may be removed with the chronic inflammation of the pharynx, by the employment of the glycerine of tannin.

It is well known that coughs are often dependent on the state of the throat. But while in theory this fact is very generally accepted, in practice it is very little applied.

In phthisis a frequent hacking cough is often dependent on the state of the throat, and can be allayed by this application. A good night's rest may be obtained by applying the paint just before going to sleep. A small quantity of morphia added to the glycerine of tannin still further increases its soothing sedative power on the throat. The paroxysms of whooping cough may be most considerably lessened in frequency and violence by well sponging out the pharynx with this application; it should be carried low down, and be brought well in contact with the epiglottis and the neighboring parts.

Its employment will be followed by no good results if the case be complicated with catarrh or other inflammation of the lungs, or if there be present tuberculosis or other conditon causing fever, or any irritation, as of teething. But in simple uncomplicated whooping cough this application may be used with decided advantage. The paroxysmal cough which is often left behind by whooping cough, or which speedily returns on exposure to cold, may be well treated in this way.

This application has the further advantage of causing no pain, and of not possessing a bad taste. It may be thought an apology is needed for occupying valuable space with the treatment of such trivial complaints. To this it may be answered, they are very common, often very obstinate, and many of them very unsightly.

The writer believes no apology will be considered necessary by those who give the application a fair trial in the purposes for which it is recommended.—*The Practitioner*, July, 1868.

Prof. Max. Leiderdorf, of Vienna, and his assistant, Dr. Breslauer, are using papaverine in insanity. The following

extract from an article in the *Medical Archives* will show with what result:

They used Merk's papav. mur., but as in a concentrated solution of it (gr. vj. to aq. oz. i.) there is soon a deposit of crystals, thus causing inequality of strength, they found necessary to keep the solution in a test tube (about an inch and a half long), and after warming until all the crystals were dissolved, to fill the hypodermic syringe direct from the test tube. It produces no inconvenience, either at or about the point of insertion, as is the case with narceine and all other substances requiring an excess of acid for their solution. It is this latter which renders Schneider's papav. phosph. unfit for hypodermic use, while for internal, it is preferable on account of its remaining in solution, even when concentrated, and the mere warmth of the hand being sufficient to redissolve any crystals that may form.

The experiments of the authors on the human system are much more important than those on the lower animals.

The first subject was a perfectly sane young man, who suffered from severe cephalalgia and sleeplessness. He took of papav. mur., gr. ½, internally, and in half an hour after felt a sense of heaviness in all his extremities, the severity of the headache soon abated, and two hours later he fell asleep, and slept soundly for several hours. The muscular lassitude lasted throughout the following day; the headache was gone, and sleep during the night following was undisturbed. The same individual took a whole grain of the same remedy, on another similar occasion, with the same results, only that the sleep lasted longer. There was neither nausea nor vomiting, oppression of the head or dizziness—in short, no unpleasant after-effect of any kind.

The cases of insanity upon which the authors first experimented, were those of a secondary form, where excessive irritability, maniacal outbursts, shouting, roaring, noisiness and obstinate sleeplessness especially required an efficient quieting remedy. In all such cases the usual sedatives, such as tepid baths, opium, morphia in increasing doses, potas. brom., etc., etc., had first been resorted to, without deriving any considerable benefit, and not without sometimes experiencing evil consequences from some of them.

The results at which they arrived from their experiments upon the human system, may be briefly summed up as follows:

1. Papaverine exercises a somniferous action on the human system.

2. It diminishes muscular activity, and, on that account, is useful in maniacal cases.

3. It with certainty diminishes the number of pulsations, not only in cases where the number has risen proportionately with the violence of muscular activity, but also in quiet, melancholic patients.

4. The quieting action of papaverine is not preceded by any state of excitement.

5. Whether administered hypodermically or by the mouth, it produces neither nausea nor vomiting; neither cephalic oppression nor dizziness, nor does it produce constipation, but will even in some cases relieve it.

6. The effect of papaverine is usually slowly manifested,—4 to 7 hours after its administration,—and its influence is not ntirely recovered from, even after 24 to 48 hours.

7. Papaverine shows its efficacy, where opium and morphia, even in large doses, remain without effect.

8. Tolerance to the remedy does not take place, at least not very soon, and the dose of it, even after its continued administration, need not therefore be increased.

9. Papaverine subdues excitement, mania and sleeplessness, only as a palliative, and exercises no direct visible influence on the aberration of the mind, or rather, on the causes which produce it.

10. The better nutrition of the patient, which takes place in many cases after a prolonged use of papaverine, depends upon the greater quietude and the restored sleep which it produces.

USE OF IODIDE OF POTASSIUM.

By Sir Henry Cooper, M.D., of Hull.

After some general remarks upon the effects of iodine on glandular tumors and thickened structural deposits, and upon the almost specific action exerted by the iodide of potassium over periostitis, Sir Henry Cooper refers more particularly to the efficacy of the iodide in syphilis and chronic rheumatism. In these last-named diseases the iodide, although often successfully employed, sometimes fails; and Sir H. Cooper attributes the failure to the fact that the drug is given only in moderate doses. He, therefore, following the plan formerly recommended by Dr. Elliotson, gives very large doses of the iodide, namely, from ten to thirty grains three times a day. It is a remarkable fact that, although a drachm of iodide of potassium represents a poisonous dose of iodine, yet thirty-grain doses may undoubtedly be given three times a day with perfect impunity; and it is still more remarkable that the occurrence of physiological symptoms, such as coryza, is almost unknown where the large doses are given. Sir H. Cooper then relates nine cases of syphilitic cachexia, in which the iodide of potassium was prescribed in large doses with marked benefit. With respect to the rheumatic cachexia the results were not so decisive, but still great amendment of the general symptoms usually followed, and sometimes also much relief of the local symptoms, from the same kind of treatment. In cases also of inflammation of mucous membranes, as in bronchitis, Sir H. Cooper thinks that relief is afforded more rapidly by combining the use of iodide of potassium with that of tartarized antimony than when either remedy is used alone, and he adduces two cases in support of this view.—*British Medical Journal*, September 28, 1867.

USE OF ETHER AND ETHERIZED COD-LIVER OIL IN THE TREATMENT OF PHTHISIS.

Dr. B. W. Foster, in a paper read before the British Medical Association, at its recent meeting, referred to the great difficulty of digesting fatty food which distinguished the great majority of phthisical patients, and stated that this defective assimilating power has hitherto been treated by incorrect or insufficient means. The only true method of treatment, he thinks, to be adopted in such cases, should be directed to the organs whose secretions are at fault. Physiology teaches that the digestion of fat is specially performed by the secretion of the pancreas and glands of the small intestine. Dr. Foster had long sought for a means of influencing these glands, and at last had found most ample evidence in the works of Claude Bernard, that ether is capable of augmenting the pancreatic secretions to almost any degree. Bernard was accustomed in his experiments to give ether to animals in order to obtain a good flow of pancreatic juice. Applying this discovery to the treatment of phthisis, Dr. Foster had met with most satisfactory results. The ether was given as a mixture sometimes, but generally in the form of etherized cod-liver oil. Of the patients treated, and all observed over some months, some over two years, 42 per cent. improved under the treatment, 30 per cent. remained stationary, and only 28 per cent. became worse; 12 per cent. of the cases treated presented all the evidence of the arrest of

the disease. In no case were the symptoms and physical signs alone accepted as evidence of improvement; every case was weighed from week to week while under observation, and only a decided increase of weight, in addition to other signs, received as evidence.—*Brit. Med. Jour.*—[*Am. Jour. Med. Sciences.*

INHALATION OF CHLOROFORM IN "CONGESTIVE CHILLS" AND THE COLD STAGE OF MIASMATIC FEVERS.

Dr. H. L. Byrd, Prof. of Obstetrics in Washington University, Baltimore, Md., says that while he has frequently prescribed chloroform by the mouth for the purpose of allaying the distressing vomiting so frequently met with in the autumnal intermittents, and also for the relief of the "ever-present headache," it is in its immediate action on the circulatory and nervous systems through the respiratory organs that he regards it as a therapeutical agent of the highest value. "My impression is, that chloroform inhaled during the cold stage of fever, or in a 'congestive chill,' to the extent of making a decided impression upon the system, is perhaps the most valuable remedy in that pathological condition, known to the profession. I say, perhaps, as I have not yet had an opportunity of testing the efficiency of *quinic ether* under such circumstances—the only other article comparable with it, in my judgment, in the whole range of our materia medica. * * With chloroform and quinic ether at hand, I predict that the heretofore fatal 'congestive chill,' which has been regarded with so much terror by the physicians of the Southwestern States, will be as easily managed as any of the milder grades of miasmatic fever."—*The Medical Bulletin.*

IODINE AN ANTIDOTE TO STRYCHNINE.

Dr. W. S. Brown writes to the Boston *Medical and Surgical Journal* thus: In your issue of Aug. 20, 1868, appears a selected article with the above heading, by Dr. Fuller, of London, in which he says:

"Neither in Dr. Taylor's work on Poisons, nor in any other work which I have had the opportunity of consulting, do I find the slightest reference to iodine as an antidote to strychnine."

On page 121 of my little work on Chemistry, published thirteen years ago, you will find a table of Poisons and their Antidotes, in which occurs this line:

"Strychnia....Dilute Tincture of Iodine." More than a year before its publication I had noticed the reaction mentioned by Dr. Fuller, viz., the precipitation of strychnia in prescriptions containing iodine; and had also tested the matter practically in a case where medicinal doses of strychnia too rapidly administered resulted in spasms; and these were speedily relieved by small doses of dilute tincture of iodine. Since then I have twice had occasion to use the antidote under somewhat similar circumstances; and in each case the spasms were evidently relieved by the frequent administration of the remedy in small doses (v. to x. gtt. in syrup, repeated three or four times in as many hours). In cases of poisoning with strychnia, I presume it would be necessary to increase the dose, and repeat it oftener; but I have no experience on that head.

ANOTHER CHALYBEATE.

Dr. J. R. Blach contributed to the Cincinnati *Lancet and Observer* the following formula for a preparation of iron which he called "liquid oxysulphate of iron:"

R. Ferri Sulph	dr. ii.
Acid Nitric	dr. iii.
Aqua Distill	oz. iss.

"Rub the sulphate with the acid in a mortar, gradually; add the water after the sulphate is all dissolved and filtered through paper. Dose, from 7 to 12 drops in water or Inf. Quinia." One drachm of the solution contains eight grains of Ferri Sulph.

Our experience of this preparation of iron is yet very limited, but where we have prescribed it, it has been taken more readily than the Tinc. Ferri Chlorid, and in fact is a much pleasanter mixture to take.

ON THE EMPLOYMENT OF BELLADONNA IN SURGICAL AFFECTIONS.

Mr. Christopher Heath states that the action of belladonna, whether applied locally or given internally, is the same, viz., that by its action upon the vasa-motor system of nerves it diminishes the calibre of the capillaries, and thus directly reduces the vascularity of an inflamed part. Its action is thus peripheral; and it is, therefore, the opposite of aconite, whose action is central, or upon the heart itself. It does not follow, however, that the two drugs cannot be employed together; quite the contrary: the action of the one is to diminish the flow of blood to the part, whilst the other assists the tissue to get rid of the superfluity it already contains and resist its further entrance, and the two may, in many morbid conditions, be advantageously combined.—*The Practitioner*, Nov. 1868—[*Dominion Medical Journal.*

TO PRESERVE SYRUP OF THE IODIDE OF IRON.

Mr. F. Baden Benger, of Manchester, England, writes to the *Pharmaceutical Journal* that he has for several years prepared the syrup extemporaneously as follows:

"A solution of iodide of iron containing 414 grains to the fluid ounce, is sealed up hot in stoppered bottles of various sizes, from two drachms upwards; and by adding forty minims of this solution to each ounce of simple syrup when required, a never-varying and nearly colorless preparation is obtained.

"The solution keeps perfectly well; the advantage of using bottles of various capacity being that there is no loss by spoiling, when one is opened—each containing only the quantity to be used at once."—*Medical Archives.*

INDIA-RUBBER SPONGE.

One of the most ingenious and useful applications of india-rubber which we have seen for a long time has been forwarded to us. It consists of a highly porous, cellular mass of vulcanized india-rubber. The material is at present only supplied in oblong, rectangular tablets, stiffened at the back by a plate of solid india-rubber. This renders it more effective for cleaning paint, windows, etc., but somewhat detracts from its use as a substitute for a bath sponge. If the makers would supply the material in oval tablets or larger masses, without any solid stiffening, it would form a most perfect imitation of sponge, and would have the great advantage of being almost indestructible. It can be used either with or without soap.—*The Chemical News.*

BROMIDE OF POTASSIUM.

Dr. Alexander J. Stone, of Boston, announces a new property of this drug—the power of checking the reflex nausea induced by the administration of anæsthetics. He claims that nausea is the almost universal effect of ether, and then relates thirty cases where it was either prevented or relieved by the administration of thirty or forty grains of this drug.—*Druggists' Circular and Chemical Gazette.*

ALCOHOL IN MUSHROOM POISONING.

Dr. Poulet, of Plancher-les-Mines (Haute-Saone), France, has sent in a paper to the Academy of Sciences, to show that alcohol taken in large doses is a sure specific in cases of poisoning by mushrooms, especially by those of the amanite genus. He further states that mere boiling in salt and vinegar is by no means sufficient to render the poisonous kinds innocuous.

CANNABAIS INDICA IN SENILE CATARRH.

Dr. J. Curran Waring writes to the *Practitioner* to say that he has found Indian hemp an invaluable remedy in catarrhus senilis. He administers it in ten-minim doses, gradually increased. Its effects, he says, must be seen to be thoroughly realized. He believes that as an anodyne it is immensely superior to every other drug.

PEPSIN IN CHOLERA INFANTUM.

Dr. Hawley, of Green Point, N. Y. (*Buffalo Medical Journal*), recommends pepsin in the advanced stages of cholera infantum and other diseases of children in which the digestive power is weakened. To a child a year old he gives five grains every three hours, combining it sometimes with an equal quantity of subnit. bismuth.

APPLICATION FOR PRURIGO.

R. Hyd. chlor. corros., gr. iv.; Bism. carb., dr. ss.; Acid. hydrocyan., dr. ss.; Liq. calcis, ad oz. viij. A solution of sulphuret of potassa in water is sometimes very effectual—dr. ij. to oz. iv.

Dr. James T. Newman, of Chicago, treats his cases of hysteria with the electro-magnetic battery.—*Chicago Med. Jour.*

MISCELLANEOUS.

THE NEW FRENCH GASLIGHT.

Messrs. Ball, Black & Co. have illuminated the show windows of their splendid store in Broadway with the bourbouze light. Its peculiar brilliance and beauty nightly attract a crowd of admiring spectators. So brilliant and pure is this light that the ordinary gas-lights look like spots of sickly and ghastly yellow when placed between the eyes and the pure white illumination of the bourbouze burners. The light is as steady as the sun. The closest examination cannot detect the least tremor. We tried it with a sheet of white paper corrugated, and inclined so that portions should be thrown into shadow, thus magnifying any motion that might be imperceptible to the unaided eye, but could not detect any motion whatever. Equal parts of oxygen and common street gas are driven simultaneously upon a pencil of magnesia: this is all there is of the mechanism of this wonderful light, which literally throws all other lights at all adapted to general use into the shade. In point of cost, when lights of equal intensities are used, the new light is so much cheaper that we should fear to be suspected of exaggeration should we make a statement of it. We are told that Messrs. Ball & Black's establishment is the first that has adopted the bourbouze light on this continent.—*Scientific American.*

OPIUM POISONING.

Dr. J. S. Boyd relates in the *British Medical Journal* a case of a man who attempted to commit suicide by swallowing two ounces of laudanum at 1 A. M. After waiting twenty minutes and not perceiving any effect from it, he cut his throat, but not deeply enough to cause death. Assistance was rendered, and the wound was dressed. The opium, however, was left in the stomach. At 9 P. M. the attendants noticed him become drowsy. A physician was summoned, who recognized the symptoms of the poison, and used energetic means to combat them, but he died at 4 A. M. next morning. The following deductions are offered:

1. The case would tend to overthrow the general opinion that the effects of opium must show themselves within an hour after administration.

2. Death was protracted for a longer period than in any other case I have seen recorded.

3. The case affords room for inquiry in regard to the effect of shock postponing the action of the poison.—*Medical and Surgical Reporter, Philada.*

[Excitement, rather than shock, was probably the cause of the action of the opium being postponed. We have always looked upon excitement, as pain—an antidote to opium.]

THE SMALL-POX.

This disease is now very prevalent and very virulent in the Western cities. A hundred deaths a week have been reported in Cincinnati. It is declared to be an epidemic in St. Louis. It is scourging Chicago, though nothing is said about it in the newspapers. In Milwaukee the public schools and the rink have been closed in consequence, and the shutting up of the theaters, concert saloons, and other places where people most do congregate, has been discussed. The Board of Health of Detroit have determined, if possible, to take a bond of this deadly fate, and protect the city against it by precautionary and preventive measures, and "stamp it out" the moment it appears. Thus far, thanks to the sanitary authorities, the city has been peculiarly exempted, but in order to guard it still more strictly, the Board of Health is determined to insist upon the necessary sanitary measures. It regards vaccination as absolutely imperative.—*Detroit Post.*

NEW GALVANIC PILE.—A new galvanic pile has been constructed, with chloride of silver for the negative element, by MM. Warren de la Rue and Hugo Muller. This pile, though of exceedingly small dimensions, is extremely powerful. It consists of a zinc rod, which need not be amalgamated, and of a thin silver wire coated with a certain quantity of chloride of silver, applied to it in a state of fusion. This is the negative, the zinc the positive element. The whole apparatus is not three inches high. The liquid used is a saturated solution of common salt. With ten couples, constructed as above, acidulated water will be rapidly decomposed. While the apparatus is working, the solution of salt becomes gradually charged with chloride of zinc, which only serves to increase the power of the pile; but care must be taken to change the solution as soon as metallic zinc makes its appearance on the negative element.

THE "GOLDEN YELLOW" HAIR DYE.—This color, so much in fashion of late, is produced by a solution of arsenic with a mordant of the hydrosulphate of ammonia. And cadmium would probably give rise to a like result. In the case of dyeing the *lighter tints*, however, it becomes necessary to submit the hair to a process of bleaching, which is commonly effected by a solution of one or other of the alkalies, by chlorine, by the chloride of soda or lime, or by sulphurous acid, bisulphate of magnesia or lime, or peroxide of hydrogen.

In general, the dyes requiring mordants do not stain the epidermis.—*Journal of Cutaneous Medicine.*

ORIGINAL COMMUNICATIONS.

CASE OF OVARIOTOMY—RECOVERY.

JOHN SCOTT, M.D., F.R.C.S.I., SURGEON TO CALIFORNIA STATE WOMEN'S HOSPITAL.

Mrs. ——, ætatus 30; married; never pregnant; seen 18th February, 1869.

History.—Menstruated at 14; married at 18; menstruation always extremely painful; abdomen began to enlarge six years ago; for the last two years has increased steadily in size, with constant and severe pain in left side and down left thigh; latterly has had shortness of breath on taking any exertion; can only lay on right side, and is feeling altogether wretched and miserable, and is anxious to be relieved of her burthen.

Examination.—Abdomen large and prominent, and measures 37 inches over the umbilicus; the swelling of an obliquely oval shape, extending from right ilium to left hypochondrium; fluctuation distinct; no appearance of adhesions; uterus high up and anteflexed; cervix movable; depth of cavity, 3½ inches.

Diagnosis.—Ovarian tumor, unilocular cyst, no adhesions; operation recommended.

The patient was put under preparatory treatment for some days, and on the morning of the 27th inst., at 10 A. M., I operated. Drs. Lane and Bennett kindly assisted me, and Dr. W. H. Davies gave the chloroform. An incision, extending four inches, between the umbilicus and the pubis, was made, and the cyst having been brought into view, was emptied by Spencer Wells' large trocar and india rubber tube, of a clear, straw-colored fluid, which filled a large bucket. The cyst was then drawn forward, with the vulsellum, when the sac was found rising direct from the right side of the uterus by a short, thick pedicle, so short that it was found impossible to apply the clamp and draw it outside the wound. The stump was transfixed and tied with twine, and returned into the abdomen. The peritoneum lining the abdominal wall, and that covering the bowels, was vascular and red, but there was no adhesion but one slight one to the omentum, which was ligatured, then cauterized and returned. There was slight oozing from some small vessels which were twisted, and the abdomen was then sponged out carefully, the sponge having been dipped in a solution of carbolic acid and water, in the proportion of one to thirty. Finally the wound was brought together by eight silk sutures, and over it was placed, first, Lister's carbolic oil on lint, then his carbolic paste covered with gutta percha tissue, and over all a flannel bandage. There was no chloroform vomiting during or after the operation, and the patient awoke, feeling very comfortable.

For four days everything progressed admirably; no pain, sleep natural and refreshing without opium; pulse eighty-four, and only troubled with copious, tenacious secretion from the back of the fauces, to which she had been subject when suffering from previous illness. Diet consisted almost entirely of milk and lime water, gruel made with half milk, half water, and ice when asked for; subsequently, beef tea alternately. On the fourth day, patient complained of sharp pain in in left hypochondrium, with tenderness on pressure, slight thirst and feverishness, and occasional vomiting, but no chills. Eight leeches to the part, and twenty grains of calomel with one of opium, gave complete relief, and the pain and the tenderness entirely disappeared. Some days afterwards, she complained of pain in the vagina, to left side, with metrorrhea, and on examination I found a slight tumefaction, painful on pressure, to the left of the uterus high up; no swelling in Douglass space or elsewhere. Three leeches applied high up, internally, and large vaginal injections of warm water removed all pain and uneasiness. On the eighth day the wound appeared to have united throughout, and I removed some of the stitches, but a few days afterwards, it separated above, and pus appeared between the lips of the incision, and from one to two ounces were discharged daily, till the end of the fourth week from the operation. By the end of the fifth week, all discharge had ceased, and the patient is now (10th April) in perfect health.

Remarks.—I regretted being obliged to return the ligated pedicle into the abdomen, as I believe it had the effect of keeping up the purulent discharge which existed so long. I had no alternative, however, for the pedicle was too short to allow the application of the clamp; in fact, properly speaking, there was no pedicle, for the cyst arose direct from the uterus itself.

It is true Dr. Bryant of Grey's Hospital, and Dr. Tyler Smith have had excellent results from the *intra*-peritoneal treatment of the pedicle, and it commonly results that the ligature becomes sacculated, and gives no further trouble. Still, cases have occurred where abscess and perforation of the bowels has resulted from the presence of the ligature, and if possible, the clamp should be used, or the pedicle transfixed and attached externally to a hare-lip pin, passed through the lower end of the incision. The absence of chloroform vomiting during and after the operation, I attribute to the careful preparatory treatment, consisting of a bland, unirritating diet, warm baths, the complete evacuation of the bowels, and the administration of full doses of bromide of potash previous to the operation.

A CASE OF STRICTURE OF THE URETHRA.

BY E. GAUVREAU, M.D.

JANUARY 25th, 1869. Capt. R., aet. 50. has been in the merchant service for over 30 years. Has been suffering for 14 years with stricture of the urethra. Has been attended by dilatation on several occasions in New York, Hong Kong, and Manila, with only negative results, as the repeated introduction of a sound has invariably brought on orchitis. When he came under my observation, his urine was constantly dribbling away, and his faeces were very often involuntarily passed. Within the last few months, he has had several epileptic fits which I think were caused by the presence of urea in the circulation; that peculiar uremic smell being quite perceptible in his breath and secretion of the skin. That peculiar odor, I believe, is as characteristic of uraemia, as that which accompanies Diphtheria, and when once smelt is never forgotten. He complained of a good deal of pain in the Hypogastrium, and upon examination I found that the bladder was fully distended. A number 2 (English) Catheter, was, after two hours patient and persevering manipulation, passed into the bladder, when about one quart of fetid urine was voided, which contained considerable pus. The Catheter passed through three distinct obstructions, one two inches from the meatus, another at the origin of the bulb, and the last in the prostatic region, this one being the worst obstacle to overcome. This first introduction of the Catheter produced a good deal of irritation, great pain in both testicles, accompanied by chills. Ordered warm hip-bath and a full dose of quinine and opium, to be repeated every three hours, with the injunction to remain in bed for

twenty-four hours. On the second day after, I succeeded in introducing a No. 3 Catheter, which allowed the same quantity of urine to escape as on the previous occasion. Catheter retained for a few hours; same symptoms repeated; quinine and opium resumed. I at once determined to rupture the strictures with Holt's improved instrument, and having put him under the influence of chloroform, Holt's director was introduced without much difficulty; then No. 11 Cylinder. Hemorrhage insignificant; acting upon Dr. Bumstead's suggestion about the non-necessity of passing and leaving a catheter to keep up the required calibre of the canal as recommended by Holt, I withdrew the instrument and no catheter was passed. Quinine and opium 2 grs., to be taken every fourth hour, and ordered a suppositary of 2 grs. of morphia. Had a few chills through the night, but managed to sleep for a few hours. No pain in the testicles. I recommended him to retain his urine as long as he could; but twelve hours after the operation, he could hold out no longer, as he said, and to his great astonishment he passed a good stream of water. No. 12 catheter was passed every second day for one week after the operation, and after that once a week for two months. He was discharged with the recommendation to introduce it once a fortnight, as he found he could now do it himself without the slightest difficulty; all obstruction having completely disappeared and the canal being perfectly smooth. He has regained his health, can retain his urine and faeces, has had no epileptic fits and considers himself completely cured.

This case was particularly well adapted to the treatment by rupture, the intense sensitiveness of the urethra not allowing the passing of a sound without causing orchitis. Holt's staff or director being size No. 4, can be passed through most strictures coming under observation.

Holt's and Bumstead's statistics show more favorable and permanent results by rupture than by any other method, and there is no doubt that rupture favors the quicker absorption of the organized tissue constituting stricture. This case is another instance of the non-necessity of introducing and leaving a catheter in the canal after the operation, in order to maintain the required calibre.

San Francisco, April 19th, 1869.

SMALL POX IN SOUTHERN OREGON.

Jacksonville, Oregon, March 26th, 1869.

Editor California Medical Gazette:

Dear Sir:—The epidemic having entirely subsided, as we think, I take the liberty of sending you an accurate report of the number of cases, together with a few other facts of interest, for publication.

During the past season there have been seventy-three cases of small pox in this valley, which includes the southern tier of counties in Oregon. Of this number, twenty-three were varioloid, about twenty-five regular small pox, and as regards the remainder, it is uncertain whether they were ever vaccinated or not. Of the twenty-five cases of regular small pox, about half had the disease in its confluent form, *every one of whom died.*

There were just twenty deaths altogether. The exact period of incubation was ascertained in thirteen cases. These were where the patients had never been exposed but on a single occasion previous to the appearance of the disease. Two were in sixteen days; four in fourteen days; three in thirteen days; and three in twelve days. In one the disease is said to have appeared in nine days, but the exposure in that case was extraordinary and constant; *watching* probably induced fever before the small pox appeared, as the fever lasted some six days before the eruption.

I was struck with the following facts in regard to vaccination. The most recent case of a person having a good vaccine mark who now took the disease, was of thirteen years standing. It was a varioloid. The *oldest* vaccination which has been exposed with impunity was of forty years standing. Though two others whose vaccinations were respectively forty and fifty years standing, took confluent small pox and died. Several cases were vaccinated only for the first time after exposure, and were protected from the disease. One case, a child, was vaccinated three days before the small pox fever appeared, and though the eruption came *thick*, the pustules aborted early and the case recovered.

Respectfully, Yours, F. GRUBE, M. D.

California Medical Gazette.

SAN FRANCISCO, MAY, 1868.

☞ *All Letters and Communications to be addressed to the* "Editor California Medical Gazette, *care of A. Roman & Co., San Francisco.*"

—— Pudet hœc, opprobia nobis
Et dici potuisse, et non potuisse refelli.
Ovid. Met. lib. 2. ver. 759.

To hear an open slander is a curse:
But not to find an answer is a worse.
Dryden.

In our last number, we mentioned with gratified feelings, in one of our Editorial notes, that certain of our daily papers had been denouncing some of the wretchedly miserable Quacks, that are infesting this city. We expressed the hope, that the worthy and honorable example would be followed by others, and that the daily Press would cease to uphold, encourage and foster this pestilent vice, by ceasing to insert the often obscene and the always mendacious advertisements of ignorant charlatans.

Those remarks drew from the *Daily Times* a denial of the fact, an abuse of ourselves, and the astounding assertion, that quackery had been actually abated in this city by the denunciations of the daily Press. Now, we are far from being irritated at anything the *Times* is *able* to say of our Gazette in the way of criticism. Any kind of criticism, either on our literary merits, or on the value of the professional information we give, we eagerly court, provided it is intelligent, honest and manly—let it come from what quarter it may,—but abusive epithets, and unsupported denials, is not intelligent, mannerly criticism—it is rude, ungentlemanly, Bohemianism, and the prostitution of a literary position.

We do not write for the public, ours is a purely professional magazine—our readers want no information, do not wish to read platitudes on the absurdity of one kind of charlatanism, or the viciousness of another. But they, and the rest of mankind,

know thoroughly that publicity is the very life of quackery, that it cannot exist without it, and that it can, now-a-days, only be obtained through the medium of advertisements in the public papers.

We think we can boast that there are not many Pecksniffs in our profession; we have our weaknesses, but this is not one, we are therefore entitled to belief when we say, that it is the honest regret of every intelligent member of this profession that so many conductors of the daily literary requirements of the people, should so far debase *their* high calling, should in fact be so immoral as to create and foster so great an evil, merely for the sake of pecuniary personal gain.

Till within a very few days past, every morning's sun that rose proved the truth of the statement we made, which the *Daily Times* so emphatically denied.

Thus how could the notorious old scoundrel, who stole away on a late steamer, have procured his victims, if one of our daily morning papers, one with the largest circulation, had not brought his lying pretentions so widely before the public, and especially in another part of the paper invited them to call at its office to see fabricated letters and certificates.

Without this newspaper puffing—the wonderful instrument with the unpronouncable name—would have glittered in his window in vain. He might have painted his name on the house ten times as often, but no suffering passer-by would have stepped in to have been eased of five hundred dollars.

No poor, weak victim would be deluded into attending an *Anatomical Lecture* "for gentlemen only," if he was not trapped into doing so, by being invited in that portion of the same paper which is devoted to the notices of *Public Amusements.*

We now ask, if we were very much wrong when we intimated that *empiricism is fostered in this city by the daily Press ?*

At the same time we are very glad to admit that there are many honorable exceptions. Some papers, we know, uniformly refuse such advertisements. We do not know if the *Daily Times* is amongst the number—we do, however, know that the *Times* is a paper of limited circulation, and would not therefore be the one chosen by the advertising knaves. It is, therefore, perforce virtuous, and mercifully spared temptation; but at the same time it is denied the opportunity of declaring how sour and unsavory such viands would be to its highly cultured palate. Before finishing, we desire to give the *Times* all credit for some very good articles on quackery. We had the paper in our mind when we wrote last month, but we quoted the *Chronicle* because we found there a little terse and trite article more suitable to our purpose than anything we saw in the *Times.*

"At a meeting of the San Francisco Medical Society, on March 9th, Dr. Morse referred to a statement made by him at a former meeting, concerning an autopsy at the Small-Pox Hospital, and the induration of the brain by alcoholic drinks. He said, that "The California Medical Gazette, in a report of the proceedings had seen fit to contradict his statement; and as he was unwilling to submit to the charge of propogating a pathological error, he desired to defend his assertion." "To do this, all that was necessary was to quote from a few *British authorities*, which he did, *because* he understood that his *critic* had received a *British education*, and because also there were few authorities that would conform with those to whom he would refer." After quoting Drs. Carpenter, Ogston and Aitken, he says: "These were highly respectable authorities, whose *eloquent* pens and *glowing* words had not failed to demonstrate all the pathological facts stated by him in his informal, verbal report of a small-pox necropsy. The profession whose attention may have been attracted by the *contradiction*, might decide between the censured and the censor."—*Pacific Medical Journal.*

Dr. Morse does not seem to see the *ridiculous* in his assertion, viz: "That from the indurated condition of the brain, he immediately recognized that the subject had been, during life, immoderately addicted to the use of alcoholic liquors." We would like to know what there is peculiar to the indurated brain of the drunkard that enabled him by the appearance and feel to immediately recognize that the induration was due to alcoholic poison, and not to any of the many other causes which may produce induration of the brain.

The California Medical Gazette no where contradicts or denies that the brain of a drunkard *may* be indurated. It says: "We would call the attention of the profession to this remark, as we were not aware ourselves that the immoderate use of alcohol would *necessarily* produce hardening of the brain."

As for Dr. Morse's quotations, we were familiar with the opinions of Drs. Carpenter, Ogston and Aitken on the subject. They believe in common with other pathologists that the brain of a drunkard *may* be indurated, but fail to demonstrate that all Dr. Morse's pathological facts, were facts, viz: that one can immediately recognize by an indurated brain, that the subject during life was necessarily a drunkard. We know very well, for instance, that lead poisoning may produce induration of the brain, which no one could distinguish from induration by alcohol, except by chemical analysis, when alcohol would be found in one case and sulphate of lead in the other. However unwilling Dr. Morse may be to "submit to the charge of propagating a patho-

logical error," we most emphatically charge him with doing so, when he states that by the appearance of an indurated brain he can "immediately recognize that the subject had been, during life, immoderately addicted to the use of alcoholic liquors."

"Dr. Gibbons, Sr., expressed his surprise that any one would deny that the brain was liable to become indurated by a prolonged life of intemperance. He had taught this for thirty years. The effect of alcohol in corrugating the tissues is well known. The students steep the brain in whiskey to solidify it for dissection. The living brain has a special affinity for alcohol, and attracts it from the blood of the drinker in larger proportion than any other organ." —*Pacific Medical Journal.*

If teaching a doctrine for thirty years established that doctrine as a fact, Shakespeare might have said "there are stranger *facts* in our philosophy than are contained in heaven and earth."

As for the effect of alcohol in corrugating the tissues, and steeping the brain in alcohol to solidify it, would seem to imply that Dr. Gibbons considered that it was the direct application of the alcohol to the brain of the drunkard which caused it to become indurated. Here we at once hit upon an interesting subject, viz: in an indurated brain of a subject who was a drunkard, was the alcohol the direct or indirect cause of the induration? Was it the direct application of the alcohol on the brain that caused its induration, or was the induration due to slow inflammatory action, or owing to the partial suspension of nutrition, which the alcohol caused, or owing to the alcohol having retarded the circulation of the blood? The drunkard, for instance, may have chronic inflammation of the stomach, or the alcohol absorbed by the liver may produce chronic inflammation of *glessons capsule.*

GRADUATES IN MEDICINE IN 1869.

Name of College.	No. of Graduates.
University of Pennsylvania	130
Jefferson Medical College, Phila.	126
Massachusetts Medical College, Boston	58
College of Phys. and Sur. N. Y.	98
University Medical College, N. Y.	82
Bellevue Hosp. Med. College, N. Y.	124
Medical College of Ohio	71
Miami Medical College, Cin.	48
Cincinnati College of Medicine	28
Buffalo Medical College	34
Med. College of State of S. Carolina	14
Rush Medical College, Chicago	108
University of Louisville	70
Med. Dep. Univ., Nashville	17

It would be interesting to the educated people of the United States, to know how many of the above 1008 *Graduates of Medicine*, are what their title should imply—educated gentlemen. How many are ignorant of the language in which medicines are written. How many whose knowledge of the English language is far below the requirements of our ordinary artisans. How many, in seeking a location to practice, will endeavor to secure one by such productions as the following, (which we received when about to leave a practice in the East), "Dear Doctor: I have just *herd* that you think of *leving* L——; you should *put* a good medical-man in your place. I would not go there in *opisition* to you, but wish you would introduce me if you *leve.*"

So long as our Medical Colleges continue the present system of selling Medical Diplomas by the wholesale, so long will there be *Graduates of Medicine* who will depend upon cunning and knavery instead of professional skill—who will placard their names upon fences and rocks as the originators, discoverers, or authors of some one or other potent mixture, so long will *Medical Gentlemen* continue to injure their eye-sight, in their attempts to read the morning news, as they are being driven through the street of our cities, or find it necessary to carry a royal octavo volume for a visiting list; so long will authors recommend their productions as "purely American which enhances its value with American students," and a President of a Medical Society attempt to elicit the sympathy of Medical gentlemen by volunteering the information that *his* "critic had received a *British* education." Any one who is at all acquainted with the American system of medical education, knows that the possessor of an American Medical Diploma, *may be a scholar and a gentleman, or may be an ignorant knave.*

Says the *Medical and Surgical Reporter*, Philadelphia:

"Let us go into any of our first-class medical schools, the University, or the Jefferson of our own city, for instance. What do we find? Perhaps more than one-half the young aspirants are ignorant of the language in which medicines are written; besides many have a very meagre English education.

How can a profession be what it should, when any one can leave his cobbler's bench, quit his plow, or throw down his pick, because he conceives he can make money easier and faster by attending two courses of lectures in some college, and gull the people in practising the divine art of 'curing.'

Let the line of demarcation be drawn between the well educated and the ignorant professional man, and at once the former will feel the benefit of the distinction. This can only be accomplished by our medical college adopting and establishing resolutions requiring a candidate to show a diploma from some classical college of which he is a graduate, as well as also a certificate of good character.

Lack of confidence and jealousy often destroy our best purposes. So it appears in this, that when one of our eastern schools, in good faith with some of her sisters, would admit none but graduates in her medical department, she was compelled to give up, on account of a want of compliance in others.

So it appears to-day that there is such a spirit of rivalry in our schools—not so much which will turn out the best, but

who will have the most graduates. This might in a manner be tolerated in our early history when there was a great demand for persons having the title. But now in our advanced civilization, when there are facilities for every one to receive a liberal education, and the demand is for more intelligent skill, let us not overflow our country with incompetent doctors.

Ohio has taken one good step in the right direction. Let Pensylvania go to the fountain source, her colleges, and let those who are permitted to go out from their walls, be wholly what their name implies, and there will be a suitable reform.

We are less sanguine about the efficacy of the reform in Ohio, when diplomas can be bought in this city for the price of a pair of boots. The apathy of medical faculties, and medical societies, will only be broken when they see year by year the public growing more and more disgusted with the ignorance and petty jealousies that now prevent the usefulness of our art to so great an extent."

We do not agree with the *Reporter* in thinking that "Ohio has taken one good step in the right direction." Legislators cannot provide fools with brains or make honest men of knaves. While there are fools to humbug, there will be knaves to humbug them, in spite of Legislation; Quackery is as old as civilization. What we do want is, that Colleges should only grant diplomas to the educated, and thus keep Quackery outside the pale of the profession. If the Colleges will guarantee to keep the ignorant out of our ranks, we will ask no protection from legislatures. We confess ourselves at a loss to see why "a free and enlightened citizen" should be deprived of the privilege of employing a homeopathist or a hydropathic or botanic or electromagnetic or spiritual or Chinese or in fact any sectarian humbug that he may choose to pay, to cure him of any disease, he may imagine or be persuaded that he is laboring under.

The present system of medical education is the mother of Quackery, and those who possess a diploma from the same university, should not mock each other with that old taunt "I'm holier than thou." But under the present system of granting diplomas, medical graduates cannot form a united body.

BOSTON MEDICAL JOURNAL.

The March number of this venerable exponent of our profession, comes to us from its new editors, Drs. Parks and Lincoln. We say venerable because it is one of the oldest in America, having entered upon its 80th volume. We welcome the return of Dr. Parks' name to the editorial duties of this journal, and are sure that its well-earned reputation will be fully sustained, but reluctantly take leave of our old friend and teacher, Dr. Cheever, whose name the friends of the *Boston Medical Journal* will ever kindly remember.

ARCHIVES OF OPTHALMOLOGY AND OTOLOGY.

The above is to be the title of a semi-annual magazine, which Wm. Wood & Co. propose to publish in New York, simultaneously with the German edition in Carlsruhe. Each half-yearly number will contain from 250 to 300 pages, to be finely illustrated. They expect to bring the first number out in May. Subscription, $7.00 per annum.

SURGERY.

Dr. Earnest Hart, Surgeon in charge of the cural department of St. Mary's Hospital, London, thinks that the treatment of Eustachian deafness has been greatly facilitated by the improved method of rhinoscopy. "There are, however, certain practical difficulties experienced in carrying out that treatment. The mouth of the Eustachian tube, hidden from the eye by the veil of the palate, is usually reached by catheterisation, through the nostril."

"Catheterisation of the Eustachian tube is accordingly, in some hands, used almost indiscriminately, where no obvious cause exists, as a means of diagnosis, as well as of treatment.

"The investigation of the state of the Eustachian aperture has, in several cases in my practice, been considerably aided by pharyngoscopic inspection. Any one, however, who attempts to carry out the inspection and treatment of the Eustachian tube by the method described by Czermak in his chapter on Rhinoscopy, will find considerable difficulty. The involuntary contraction of the palate, when lifted by the hooked spatula, leaves but little space for the mirror, and renders the manipulations for inspection, and especially for treatment, very embarrassing. It is probably owing to the unsatisfactory experience thus acquired, that the visual inspection of the parts, and their treatment by local applications directed by the eye, have not been more employed. To facilitate this manœuvre, I have been in the habit of clipping the nostril so as to prevent nasal respiration, and directing the patient (as laryngoscopists do) to sound the *ah* with open mouth. By leaving the tongue in this position, and depressing it with a spatula, the patient continues to breathe the sound without uttering it, the palate is left relaxed, and the proceedings are greatly facilitated.

"I find that M. Fournié has been led by some physiological considerations to the same or a very similar method to that which I have for some time adopted in hospital and private practice, and can answer for its practical success. I have at this moment two patients in whom this mode of investigation has been very useful. The one had been treated for some time by external applications, and by catheterisation of the Eustachian tube, for deafness which can by this examination be seen to depend on caries of the posterior nares. The other (a policeman sent to me by Mr. Holmes, the Surgeon-in-chief) is suffering total deafness from acute circumscribed inflammation of the Eustachian tubes and the mucous membrane immediately surrounding them, the tubes being almost impermeably strictured. He is improving under the local application of nitrate of silver by a bent *porte-caustique* and dilatation of the tube by fine gum-elastic bougies."—*British Medical Journal.*

By Furneaux Jordan, F.R.C.S., Surgeon to the Queen's Hospital, Professor of Surgery at Queen's College.

It is gratifying to me to know that Mr. Noble Smith has found "most satisfactory" results (*British Medical Jonrnal*, Jan. 30th,) from the treatment of acute orchitis which I described at Oxford. May I suggest that still better results may be obtained by using a stronger solution of nitrate of silver, and applying it *immediately* the cases present themselves?

In very acute cases, I add a little vesication over the femoral artery of the same side. This is the treatment, as seen in a severe double orchitis treated in my absence, and reported to me by a correct observer, our house-surgeon, Dr. Jolly. A man, aged 30, had intense pain, intolerable tenderness, and great swelling and induration, in both testicles, and could

not stand upright. The scrotum was covered with a solution of nitrate of silver (two drachms to an ounce); a stripe of vesication was established over the upper halves of both femoral arteries by means of linimentum iodi; and the testicles supported with cotton-wool. He was well in twenty-four hours.

The treatment of orchitis is of more than ordinary importance, from the discovery by Dr. Marion Sims that closure of the vas deferens from acute orchitis is a common cause of sterility—often where the blame is laid to the wife.

The return of some urethral discharge is best removed, often in a few days, by maintaining, with iodine, a disc of milder counter-irritation, the centre of the disc being the genital organs. On this principle I treat all inflammations of the genito-urinary organs, male and female; adding in the acute forms, a little vesication on the sheltered position of the femoral arteries.

The above treatment of acute orchitis is simply an illustration of a new system of treating all inflammatory diseases, and which I constantly adopt in all, with a success proportionately as great as in acute orchitis. A brief sketch of the system appears in the February *Practitioner*.

J. D. Heaton, M.D., F.R.C.P., Physician to the Leeds General Infirmary, reports to the *British Medical Journal* a case of malignant disease of the omentum simulating ovarian dropsy:

Jane A., aged 45, of full stature, dark complexion, black hair, anxious countenance, well nourished, was admitted to the Infirmary, having a large tumour in the abdomen, causing a prominence like that of advanced pregnancy. She had not noticed this enlargement for more than three months, during which time, she said, it had gradually increased to its present size, having always had a symmetrical form and position. She made no complaint of pain or other definite symptoms; had a poor appetite, and occasional nausea and vomiting. Added to the natural darkness of complexion, some bilious discoloration was apparent in the face and conjunctiva. There was some œdema of the ankles. The enlargement of the abdomen was symmetrical and evenly rounded, distinctly fluctuating. Percussion over the *front* of the abdomen, from the stomach downwards, gave a dull sound; *laterally* (as the patient lay supine), there was intestinal resonance of stroke-sound along both flanks. Some more irregular solid resistance might be felt in the right hypochondrium; this was supposed to be an enlargement of the liver, probably malignant. Though the unfavorable condition of the patient precluded the idea of transference for surgical operation on what was believed to be an ovarian tumour, she remained in the house for a few days, during which time the only special symptoms were want of appetite and occasional sickness. Just a week after her admission, one morning she seemed feeble and prostrate; and, shortly before dinner-time, Mr. Bradley, the house-surgeon, was called hastily to her from a neighboring ward, but before his arrival she was dead, attention having been drawn to her condition only by a slight rattling sound in the throat.

The post mortem revealed an enlarged omentum overspreading the intestines, and enclosing a quantity of fluid, which fluctuated with every movement of the body. The anterior layer of omentum was thickened and studded with patches of a yellow opaque deposit, the posterior was thickened by medullary growth on its inner surface, and extensively adherent to the intestines. There was a large medullary growth behind the omentum, containing several cavities filled with similar fluid to that in the omentum. The liver was somewhat enlarged, and contained nodules of medullary cancer.

This is an important case, from the fact, that had the case not been so far advanced the woman might have been operated on for ovarian disease. And it also goes to illustrate how frequently blunders in diagnosis are buried with the patient, when post mortem examinations are denied.

DISLOCATION OF THE TENDON OF THE PERONEUS LONGUS MUSCLE.

By T. B. Curling, F.R.S., Surgeon to the London Hospital.

A young gentleman, about 21 years of age, in May last met with an accident in jumping, by his left foot slipping on a stone and turning outwards He felt considerable pain in the ankle, became lame, and sensible of something being wrong. On taking off his boot, he found a projecting cord at the outer and front part of the ankle; this he easily pressed back, with instantaneous relief. In the course of the following week, the displacement recurred twice; and the patient sent for Mr. Bailey, a surgeon at Wansford, who at once ascertained the case to be a dislocation of the tendon of the peroneus longus muscle. He applied an angular piece of cork to the margin of the fibula, so as to prevent the tendon from slipping over it; and confined this with a bandage. A few days afterwards, the patient called on me, when I found the tendon in its usual site, rather more prominent than usual. The cork pad was re-applied, and kept in place with strapping and a bandage; and walking exercise forbidden. After a few weeks, I had a laced-up ankle-support, with a pad to fit behind the fibula, made; and he was then allowed to move about, and he shortly returned into the country. He paid me a visit in December, seven months after the accident. He stated that the tendon had kept in place, but he occasionally felt a weakness in the part, and a sensation as if the sinew was not secure, especially in walking on rough ground. He was about to emigrate to Australia. I recommended his continuing to wear the laced-up sock and pad for some years.

Dislocation of the peroneus longus tendon is so rare an accident, that the particulars of a case are worthy of record. Two or three of my professional friends state that they have met with it, but I have no recollection of having read any account of it in books. The nature of the case can readily be recognized, and the tendon can be easily replaced behind the fibula. The great difficulty is to keep it there after rupture of the sheath, as the tendon so readily slips forward in the movements of the foot, which at once gives rise to lameness. This has caused so much annoyance, that it has been proposed to divide the tendon subcutaneously. In the above case, the tendon had been retained in place many months by great care on the part of the patient, who fully appreciated the difficulty of the treatment, and never moved about with out the support of the bandage.—*Brit. Med. Jour.*

VESICO-INTESTINAL FISTULA; COLOTOMY.

(Under the care of Mr. Maunder of the London Hospital.)

For the notes of this case we are indebted to Mr. G. E. Herman.

J. F., aged 59, had suffered from diarrhœa for some months before coming under observation. On admission, he was the subject of a communication between the bowel and bladder; was greatly emaciated, and experienced very often intolerable pains, more especially in micturition. The symptoms indicated that the disease began in the intestine and spread to the bladder, and also that the communication between them was high up in the rectum. On July 10th, 1868, colotomy was performed in the left loin with the greatest possible relief to suffering. The patient died calmly, about six weeks subsequently, of exhaustion consequent on previous suffering. After death a large but simple ulcer was found at the lower part of the sigmoid flexure, and in center of it a small perforation communicating with the interior of the bladder. It was much to be regretted that the operation had not been performed earlier, and before the vital powers were worn out by the agony which this man had evidently endured. This is the second case of the kind in which Mr. Maunder has performed colotomy for the relief of intolerable pain, and with unmistakable benefit. He has also recently performed a similar operation for the relief of intractable and exhausting stricture in a female aged 60; a pathological condition in which Mr. Curling advised and has performed colotomy. There can be no doubt that this oper-

ation is capable of prolonging life and diminishing human suffering more than is generally supposed. Its consequences are not so disgusting as they appear to be at first sight, and it entails little risk to life. Nearly twelve months ago Mr. Maunder operated on a female about seventy years of age, for obstruction, and she still remains in fair health.

EXTENSIVE CASE OF EPITHELIOMA OF THE LIP.

By William Anderson, M.D., Newfoundland.

Richard B., aged 68, hunter, affected with epithelioma of the outer angle of the mouth and nearly the whole of the lower lip. On November 1st, with the assistance of my friend Dr. Howley of Harbor Grace, I removed the whole of the disease, cutting as wide of it as seemed necessary. Owing to the amount of substance removed, the sides of the wound could not be approximated without risk of tension. I therefore continued the apex of the first incision downwards under the chin, and then made two incisions, right and left, at right angles to its extremity, as far back as the facial artery on each side. The soft parts were then raised and turned upwards; they were then apposed in the middle line, so that the cut surface of the original incision became horizontal to form the new lip. The gap made by removal of the angle of the mouth was filled by stitching its upper edge to its lower, the parts being now sufficiently loose to admit of it. Recovery was uninterrupted, and the patient left his bed seven days after the operation.

COMPRESSION OF A CONSIDERABLE PORTION OF THE SKULL-CAP IN AN INFANT SIX MONTHS OLD.

By W. A. Elliston, M. D., Ipswich.

A few months since, an infant, aged six months, was brought to my house, in a state of collapse and vomiting, having fallen from the arms of the nurse-girl upon a flight of brick steps. Upon examining the child, I found that a large portion of the cranium, a surface of two and a half inches by one and a half inches, and extending over and including the posterior portion of the temporal bone, and the upper part of the parietal and occipital bones, had been driven inwards upon the brain, leaving a considerable depression, into which, half a hen's egg cut in the longitudinal direction could have been easily laid. I naturally gave an unfavorable prognosis, and had some doubt whether I ought not to have interfered surgically at once. However, upon seeing the child one hour later in the evening, I found the depression less, the child no worse, and therefore decided that it would be better to wait for more urgent symptoms. I accordingly sent the child into the East Suffolk Hospital, in order that she could be carefully watched. Two days later she was discharged from the hospital much improved; and, one week later, the depression had almost disappeared.

PRACTICE OF MEDICINE.

ON THE USE OF CHARCOAL RESPIRATORS IN DISEASES OF THE LUNGS AND AIR-PASSAGES.

By William Marcet, M. D., F. R. S., Assistant-Physician to the Hospital for Consumption.

I have been recommending the use of charcoal respirators to sufferers from phthisis and (as a rule) from inflammatory infections of the lungs and air-passages (larynx and pharynx); and these patients have undoubtedly derived benefit from this very simple means of protection against the admission of impure and cold air into their lungs.

The property of charcoal of acting as a sieve for the removal of fine particles of dust or other mechanical impurities contained in it, is, I believe, not so generally known or acknowledged as its power of purifying air from any gaseous contamination. I had an opportunity some years ago, when assistant-physician to the Westminster Hospital of judging of the value of charcoal as a means of purifying air from the very finest dust. On this occasion a chaff-cutter applied to me to be treated for chronic bronchitis of a severe form. He complained of the dust, which he was constantly breathing while at work, causing much irritation in the chest. It then occured to me that, by wearing a charcoal respirator, my patient might be saved from the obvious cause of his illness. Having procured one of these respirators, made so as to protect both mouth and nose, I went to see the man at work. He was enveloped in a cloud of dust, mostly of the finest description, which was accumulating about the room to a considerable depth. On my standing close to the chaff-cutter, I was actually suffocated by the dust; but from acquired habit, he could bear it. I then put on the respirator, and was astonished on finding that, in the thickest of the dust, I could breathe as freely and as comfortably as in pure air. The man took to wearing the respirator when chaff-cutting, and often since then gratefully acknowledged the benefit which he derived from it.

It is hardly necessary to insist on the importance of preserving diseased lungs from solid particles suspended in the air which is breathed. I need only remark that, especially in large towns, minute particles of various substances are constantly floating about in the air; and that they must be a constant cause of irritation, from which it is important to preserve inflamed or otherwise affected organs of respiration.

With respect to air contaminated with foreign gases, these may act either as a source of irritation to the lungs or throat, or be taken up into the blood through the lungs, interfering with the already reduced power of nutrition.

Charcoal retains a certain proportion of the heat of the expired air, imparting warmth to that which is taken into the lungs.

A number of my patients attending the Consumption Hospital, Brompton, have been wearing charcoal respirators of a rough construction, from which they derive relief and comfort. Mr. Rooff, of No. 7, Willow Walk, Kentish Town, has made at my request, an improved charcoal respirator, which is inexpensive, and will, I think, be found to answer its purpose quite satisfactorily.

The following extract from Watt's *Dictionary of Chemistry* bears directly on this subject;—"Wood-charcoal and other porous forms of carbon have the property of absorbing large quantities of gases. This property of charcoal has been applied by Dr. Stenhouse to the construction of ventilators, and respirators for purifying infected atmospheres. In a pamphlet bearing the title *On Charcoal as a Disenfectant*, Dr. Stenhouse observes: 'Charcoal not only absorbs effluvia and gaseous bodies, but especially when in contact with atmospheric air, rapidly oxidises and destroys many of the easily alterable ones.'"—*British Medical Journal.*

ASCITES: FAILURE OF DIURETICS AND PURGATIVES: RECOVERY UNDER TONICS.

By C. M. Durrant, M. D., Physician to East Suffolk and Ipswich Hospital.

A young woman, aged 24, was admitted into the Ipswich Hospital in the spring of the present year. She stated that she had suffered for some weeks from pain and tenderness of the body, which was followed by gradually increasing swelling of the entire abdomen. On removing her dress, the body

was found to be enormously distended, much larger than obtains at the period just before delivery. Fluctuation was distinct over every part, and there was no tympanitic resonance. There was slight tenderness in the right hypochondium, but firm and deep pressure over the other parts of the abdomen caused no complaints. She looked thin, but her tongue was fairly clean; appetite good; bowels regular; and catamenia normal.

The commencing treatment was very active. The abdomen was blistered, and subsequently repeatedly painted with iodine solution. Diuretics, including digitalis with calomel and squills, even to the extent of producing slight ptyalism, were had recourse to; at the same time watery evacuations were ensured by the steady administration of elaterium, sulphate of magnesia, etc. This treatment signally failed; a large quantity of water was daily removed, but it as steadily re-accumulated. The question of tapping now became a prominent one; and more than one surgeon who saw the case, deemed it the only available remedy. Pain and fever being still absent, I confess that I was unwilling to adopt this more formidable measure, and resolved on trying the effect of steel in large doses. The tincture of the per-chloride of iron was now given three times daily, in doses of twenty minims, with cod-liver-oil and full diet and wine. From the commencement of this treatment, the dropsy gradually but steadily subsided. On admeasurement, the abdomen diminished from four to six inches weekly in size; and, without further varying the treatment, she left the hospital quite recovered.

As the treatment of abdominal dropsy by tonics has been lately under discussion, I have thought that a detail of the above well marked case might prove interesting. At all events it shows that, when the venous system is unduly and persistently distended, mere evacuant treatment will be insufficient without increasing the vaso-motor nerve-power, and the circulation *a tergo*, by tonics and stimulants.—*British Medical Journal.*

TONICS IN DROPSY.

By R. S. Sisson, M. D. Maida Hill.

I am glad to find that the profession are, at last, beginning to recognize the value of tonics in certain forms and stages in dropsy. I say certain forms and stages, because there are some forms of dropsy in which diuretics are useless and tonics curative; whilst in other forms the effusion can only be removed by diuretics, and re-accumulation prevented by the employment of tonics.

In 1860 I was called to a patient whom I found in bed, presenting the following symptoms:—face much bloated; abdomen very protuberant; body generally anasarcous, with large dropsical swellings in depending parts; much emaciation in the parts not concealed by effusion; great dyspnœa; intolerance of the horizontal position; incessant cough, thin and frothy expectoration; great pain in the chest; on percussion, marked dullness on the right side, over the lower half of the lungs posteriorly and anteriorly; loud crepitations; mucous *rales*; pulse 100, feeble; turbid scanty urine of dark brown color, not coagulable by heat and nitric acid; liquid, dark, and offensive stools. The heart-sounds were weak, but normal.

Under the usual routine treatment, the more urgent symptoms disappeared, but the legs became enormously distended. Having satisfied myself that no organic disease existed, I concluded that the dropsical effusion in this case depended upon some pathological condition of the blood; and accordingly I prescribed the muriated tincture of iron. Under this treatment the patient made an excellent recovery, and up to this date has had no return of her complaint.

This case is reported at some length in the *Lancet* 1860, v. 2, p. 132, and is of further interest from the fact that an ovarian tumor, of many years standing, disappeared during treament.—*British Medical Journal.*

PHYSIOLOGY.

THE PATHOGENESIS OF EPILEPSY.

Dr. Brown-Sèquare has communicated to the French Academy the results of new researches which he has made upon animals in order to study the effects of lesions of the spinal cord. Carrying further his well-known experiments of cutting one of the lateral columns of the spinal cord near the tenth dorsal vertebra, he has ascertained that epileptiform attacks may be induced in guinea-pigs, not only by this means, but also by the section of the cord higher up and nearer the bulb. He has also seen the attacks occur after a double section in the muscles innervated by the segment of the cord comprised between the two sections. Thus it would seem that the greater part of the cord takes an active part in the production of the convulsions. The brain seems to take no part in them. He has removed the brain, cerebellum, and pons from these epileptic guinea-pigs, maintaining life by artificial respiration. The epileptic attacks have continued, in spite of the removal of the encephalon. In the course of the discussion, M. Colin threw doubt on the truly epileptic character of these attacks. Dr. Brown Sèquard said he had only once been able to produce epilepsy by unilateral division of the cord in any other animal than a guinea-pig: this was in a cat. The attacks produced in the guinea-pig were truly epileptic; and the epilepsy so produced was hereditarily transmitted. M. Hardy said that clinical observation in the human subject showed that compression or injury of the brain, traumatic or by tumor, especially the posterior part, did produce epileptiform symptoms; while injuries of the spinal cord did not. There was a complete discordance between these clinical observations and the results of Dr. Brown-Sèquard's experiments. Dr. Brown-Séquard said that, after analysing hundreds of cases of cerebral lesion, he was convinced that diseases of the cerebral substance were incapable of producing epileptic symptoms; and that, when these occurred in the course of encephalic disease, he was disposed to attribute them to concomitant lesions of the meninges. M. Ricord confirmed the experience of Dr. Hardy.—*British Medical Journal.*

PATHOLOGY.

NOTE ON THE PATHOLOGY OF HEPATIC ABSCESS.

By C. Morehead, M. D., F. R. C. P., Edinburgh.

Dr. Budd, in his work on *Diseases of the Liver*, published in 1845, concluded from very limited data, that abscess in the liver depended, if not exclusively, most generally on intestinal ulceration—in other words, that it was pyæmic in its origin. In my *Clinical Researches*, first edition, published in 1856, it was contended that, though hepatic abscess caused by pyæmia might be an occasional occurrence, the theory could not be accepted as generally correct; because, in my own experience, there had been fifty fatal cases of dysenteric ulceration without hepatic abscess, and seventeen fatal cases of hepatic abscess without ulceration of the intestine. In the second edition of my work, published in 1860, the same statement is repeated, with the addition of four to the cases of hepatic abscess without ulceration.

In the report of the European General Hospital of Bombay, for the year 1859, published in the *Transactions* of the Medical and Physical Society of Bombay, in 1860, Dr. H. A. Leith remarks :—"On arranging all the cases in which dysenteric ulceration, and all in which hepatic abscess was seen after death, there are found dysentery without hepatic abscess in thirty, dysentery with hepatic abscess in five, and hepatic abscess without dysentery in four instances. If all such cases that have occurred in this hospital in the last three years be added to those given in Dr. Stowell's decennium of the hospital statistics, recorded in the *Transactions* of the Medical and Physical Society, 1855-56, there will be the aggregate of—dysentery without hepatic abscess 188 ; dysentery with hepatic abscess 50 ; hepatic abscess without dysentery 41." Adding these figures to my own, we have 238 of dysenteric ulceration without hepatic abscess ; and 62 of hepatic abscess without ulceration of the intestine—sufficient, I apprehend, to disprove the pyæmic theory. I recur to this subject at present, because Dr. Leith's statement has only now for the first time caught my attention, and it is of importance that there should be no doubt respecting a pathological error which Dr. Budd still teaches without modification or reserve in an edition of his work published subsequently to my *Clinical Researches.*

THE FACULTY OF SPEECH.

At the Medical Society of London, on February 22d, 1869, (Dr. Richardson, President, in the Chair), Dr. Day, of Stafford made an interesting communication on Cases of Injury to the Brain. The author announced his purpose to be chiefly a record of the clinical history of cases of injury to the brain, which bore upon the question of aphasia and the localization of the faculty of speech. He first showed, from a review of the older writers from Galen downwards, that the question which was now agitated was not a new one. Theophilus assigned *memory,* and with it memory of words and philosophy of speech to the third or posterior portion of the cerebrum. Dr. Wigan had used the same argument and almost the same words as Dr. Maudsley in the present day to illustrate the philosophy of speech by the philosophy of vision. In the first case related by the author, a man aged 27, syphilitic, suffered sudden pain in the right temple, progressive impairment of sight in the right eye, with signs of intraocular anæmia, after much exertion. He died eighteen months after the commencement of the symptoms. The *post mortem* examination showed complete disorganization of the left cerebral hemisphere, adherent and opaque membranes, and thickening of cranial bones ; yet there had been no signs of cerebral implication during life, except the symptoms referred to vision. A man, aged 30, had suffered from the bursting of a gun, shattering and driving in the forehead. He recovered from the primary effects, regained perfect intellect and consciousness, was committed to gaol for felony, and died there suddenly. At the *post mortem* examination, the right hemisphere was found completely disorganized, and a mass of iron gun-barrel, weighing eight ounces, was found in this side of the brain ; yet in this case there had been perfect performance of the cerebral functions. A man, aged 53, had enjoyed apparent good health, with ordinary discharge of intellectual functions, till twenty-four hours before death. Disintegration of the left hemisphere by a cancerous mass was found ; and the right hemisphere also was softened. A boy, after fracture of the frontal bone, recovered all his powers. He died suddenly ; and, on examination, the dura matter was found to be inflamed throughout, and ulcerated in three points. A severe blasting accident has been recorded in an American paper. The surgeon who reports the case passed a director from the frontal laceration to the occipital bone, turning it round and round. He remarks, "both hemispheres must have been made a complete puddle of." Yet the patient recovered health and function. These cases, Dr. Day thought, were completely subversive of the imagining of those who have given to the faculty of speech a habitation in a localized spot of brain-matter. One case opposed the view of Bell ; for, though the hemispheres were disintegrated vision was perfect. A vigorous discussion ensued, in which Dr. Semple, Mr. Jabez Hogg, Dr. Thudichum and others, took part. The President also remarked that "he laid it down as a dogma, that definite lesions produce definite symptoms. *Post mortem* appearances of the brain may lead to false inferences, on account of the rapid decomposition of the brain ; and this might occur even during the time occupied by the autopsy." Dr. Day, replying, said that, with one exception, the inspections were made within four hours after death ; and in the cases attested by himself, there was no symptom which could indicate, notwithstanding the undoubted physical disorganization of brain, that the patients were intellectually wrong.

OBSTETRICS.

INVERSION OF THE UTERUS.

James Blake, M.D,, Professor of Obstetrics and Diseases of Women and Children, Toland Medical College, reports a case of inversion of the uterus, in the *Pacific Medical Journal.* He says the child was born two hours before the arrival of the physician, the woman going on comfortably, but the placenta had not been delivered. In attempting to deliver the placenta, the uterus was inverted. The placenta which was adhering to the inverted uterus was removed. It was followed by a great deal of flooding. Unsuccessful attempts were made to reduce the uterus. After five or six hours another physician was called in, and an attempt was again made at reduction, but owing to the prostration of the patient, had to be discontinued, as manipulation of the uterus increased the hemorrhage. After twenty-four hours, the patient having partially rallied, a persistent attempt to replace the uterus was made, under the influence of chloroform, but failed.

On the 29th of September, (two days after the child was delivered) Dr. Blake was sent for, but could not be found, and another physician returned with the messenger. Kept the woman three hours under the influence of chloroform, but failed to reduce the inverted uterus.

Dr. Blake having again been sent for, advised the friends, as the patient was comfortable, and no hemorrhage, to wait until the third week after labor, when the process of involution is the most rapid. He accordingly visited the patient on the 22d of October, gave her chloroform, and in thirty minutes, by Dr. Emmet's method, reduced the uterus. Dr. Blake thinks that from the facility with which he reduced the uterus, that his course of treatment, viz.: in waiting until three weeks after labor, was the proper course to pursue in such cases.

Dr. A. K. Reynolds, St. Louis, reports a case of inversion of the uterus, in the *Humboldt Medical Archives,* which he reduced after four and a half years duration :

"On the 28th of May, in the presence of Dr. DeFoe (in charge) and Dr. G. G. Lyon, of Alton, by request of the former, I attempted the reduction of the inversion, but after a patient and careful manipulation for one hour, a greater

length of time than generally deemed advisable, it was found necessary to abandon the attempt for that day, the rigidity of the cervix being too great to admit of reduction without injury to the parts. Upon consultation, it was then decided to introduce an elastic air-bag, for the purpose of supporting the tumor, distending the vagina, and relaxing the rigid contraction of the cervix. The bag was inflated by means of a large syringe, and was allowed to remain twenty-four hours at a time, the parts being washed out, and the secretions removed each morning, before its re-introduction, by injections of warm water.

Morphiæ acetas was ordered, to allay irritability, and although the effort at reduction was, as stated, continued for an hour, it was followed by neither pain, fever, or inflammatory action.

On May 31st, Drs. DeFoe and Lyons again present, it was found that the air-bag had been of great benefit, both in supporting the tumor and distending and relaxing the parts, the extreme rigidity of the os and cervix having in a great measure disappeared. By request, as before, I made a second attempt at reduction, which, in thirty minutes, was completely successful.

After reducing the fundus almost within the cervix, by manipulation, the operation was completed by means of an instrument made as follows: A piece of wood was turned like a small top, with the larger end concave. To the smaller end of this was screwed an iron wire, three-sixteenths of an inch in diameter, having a suitable wooden handle, and the larger end was covered with a thickness of cotton batting, and this again with oiled silk. When finished the instrument was of suitable size to pass easily through the os and cervix, and receiving the fundus in its cup-shaped cavity or depression, could follow it up, where the hand could no longer be used to advantage.

August 15.—The patient is now in perfect health; says she never felt better in her life. There has been no return of the displacement, and the cervix is normal in appearance. The cure is perfect, and seemingly, there is now nothing to prevent her bearing children again.

The only medication to which she was subjected was the use of morphia, as already stated, and subsequently, being anæmic from previous loss of blood, tinct. ferri. chlor. gr. 30, ter die, was prescribed by Dr. DeFoe, and continued for some time.

ELECTRO-THERAPEUTICS.

Neseman (*Berliner Klin. Wochenschrift*, 1868, No. 37) describes a case of progressive muscular atrophy, the most interesting features of which were the extremely rapid development of the disease and its successful treatment by means of Galvanism. The first sympton was a feeling of weakness in the arms after any considerable muscular exertion. Within three months, all the voluntary muscles, with the exception of those of expression and mastication, were atrophied and paralysed. As induced electrical (Faradic) currents were employed without beneficial effect, the continuous (Galvanic) current was used, so as to act upon the trunk of the cervical sympathetic nerve. A current derived from twenty Daniell's elements, was passed through the nerve daily for ten minutes. At the commencement of each daily application, the positive (copper) pole was placed on the nape of the neck, and the negative (zinc) pole over the cervical sympathetic. Then the copper pole was placed over the lower, and the zinc pole over the upper, portion of the nerve on either side. Under this treatment the fibrillar contractions of the muscles soon disappeared. After four months, the patient could walk unaided; and after fifteen months he was completely restored.—*British Medical Journal.*

There is a doctor for every 1,000 inhabitants in Paris, and the apothecaries number 547. There are also 295 officers of health.

MISCELLANEOUS.

MANSLAUGHTER BY SMALL-POX.

From the registrar's notes, appended to the last Quarterly Return of the Registrar-General, we learn something of the results of the perversity of the Sheffield guardians, in the matter of vaccination, and see the effects of their determined opposition to the working of the Vaccination Act, and of their neglect to perform, in this respect, the duties which the Legislature has imposed upon them. In the notes referred to, we find it stated that in the quarter ending December 31st, 1868, there have been no fewer than one hundred and seventeen deaths from small-pox. This is a sad record of the wilful neglect of those who are appointed as guardians of the public health; and the Board to whom this terrible and unnecessary sacrifice of human life is due cannot fail to be the object of well merited indignation. The recent reports in the local newspapers have given us information of the perverse neglect of this Board to enforce vaccination; and we should be glad to hear that some measure would be brought in by the Government, whereby such disgraceful conduct on the part of local authorities may be rendered penal. It is a pleasure to contrast with this neglect the results of an efficient discharge of duties, in the matter of vaccination, by the Chorlton guardians. The testimony to the beneficial effects of vaccination is given in the following words, by the registrar of the Hulme subdistrict: "It is worthy of remark that there has not been one death registered from small-pox, during the whole year." While we cannot too highly reprobate the conduct of the Sheffield guardians, it is a pleasure to be able to record the good effects resulting from the work of the Chorlton Board. We think that with the overwhelming proof before us, of the efficacy of vaccination, it is quite time that some means should be devised for putting a stop to the agitation which is being carried on by those mischievous and ignorant persons who style themselves the Anti-Vaccination League.—*British Medical Journal.*

THE ALLEGED INCREASE OF LUNACY.

Dr. C. Lockhart Robertson, in a paper read lately before the Medico-Psychological Association, states that in 1844 there were 20,611 lunatics in England and Wales, or 1 in 802 of the population. In 1868, this number had risen to 50,118, or 1 in 432 of the population. The statistics of lunacy in France showed a similar increase in the total number of the insane, having risen from 1 in 796 of the population to 1 in 444, between 1851 and 1861. Dr. Robertson argued that this apparent increase was simply the result of more accurate registration of the insane, and the consequence of the opening of the county asylums; and that all recent lunacy legislation tended directly to increase their recorded numbers. In examining the question at issue statistically, Dr. Robertson confined his observations chiefly to the numbers of the insane in asylums, and showed that the yearly increase observed had been in a decreasing ratio, passing in quinquennial periods, since 1844, from an annual rate of increase of 5.6 per cent. to one of 3.8 per cent. in 1867. He showed that the same result followed in France, and he argued that this increase only represented the difference between the yearly admissions and the discharges and deaths. Among the private lunatics, there is a decrease during the decennium 1857–67, despite the increasing population of the country. The proportion of pauper lunatics to the population also remained nearly stationary, being .016 in 1857, and .019 in 1867.

Tested by the admissions into the asylums during the same period (1857–67), the rate of increase is also in a yearly decreasing ratio, falling from 11.7 per cent. to an annual average of 3 per cent. From these facts, which were enforced by many elaborate statistical tables, Dr. Robertson deduced that the alleged increase of lunacy is a fallacy, and not borne out by the experience of the last decennium, 1857–67.—*British Medical Journal.*

BELLADONNA AS AN ANTI-GALACTIC.

Dr. D. W. Storment, of Topeka, Kansas, says that a solution of two drachms of extract of belladonna in a fluid ounce of water, applied over the breast with a brush, will stop the secretion of milk, and that its application to one breast will suspend its secretory action, without affecting the other, and hence recommends it in mammary abscess.—*Medical Record,* Oct. 1st, N. Y.

NEW USE OF IODIDE OF POTASSIUM.

Dr. A. de Beaufort (*Bulletin de Therapeutique*) reflecting that iodide of potassium is freely eliminated in the tears and uterine mucous, tried it in free doses, in cases of chronic inflammation of the lachrymal tube, and also in chronic metritis. His success was most decided. He says: "In cases of internal metritis, with abundant leuchorrhea, and all that train of circumstances which render so many women miserable, I have often seen, when all other means have failed, prompt and decided amelioration, and in some cases positive cure, result from the free use of iodide of potassium.—*Philadelphia Medical and Surgical Reporter.*

THE TREATMENT OF EPILEPSY BY BROMIDE OF POTASSIUM IN LARGE DOSES.

The experience of Sir C. Locock, Drs. Radcliffe, Browns, Sèquard, Williams (Northampton), Robert McDonnell, and others, has been followed and confirmed by successes by MM. Voisin and Falret. Small doses have failed. Given in doses from one to three drachms daily, M. Voisin found that of twenty-four patients, four were relieved from their attacks, six much improved, ten slightly improved four did not find any benefit. M. Falret who succeeded to the charge of the patients at the Bicêtre, in a subsequent note, states that this result was confirmed, and gives further details. M. Legrand du Saulle says that, of forty-one patients, one seems cured (since eleven months); five have have been free for long periods, three to seven months; six have considerable improved; nine have not been benefited. The rest are under treatment. Thus, all three physicians of the Bicêtre find great benefit result in a large proportion of cases. Small doses are useless.—*British Medical Journal.*

Poisonous Dyes.—M. Tardieu, the celebrated French chemist, has made some interesting and important experiments with red stockings imported from England. After extracting the coloring matter, he introduced a certain quantity of it beneath the skin of a dog, which died in twelve hours. A rabbit similarly treated expired in eight hours, and a frog in four. Opening the animals, M. Tardieu re-extracted the red colouring matter from their bodies, and with it dyed a skein of silk. In his report, communicated to the Académie des Sciences, M. Tardieu condemns the use of the "coraline" (the mineral (*sic*) poison to which the fatal stockings owe their brilliant but deceptive hue) as an article of general commerce; and recommends that the importation of red stockings from England be absolutely prohibited.—*Manchester Guardian.*

New Method of Making Ice.—A few days ago a number of gentlemen by special invitation witnessed the operations of a new invention which bids fair to be one of great practical value. It is a process of making ice and refrigerating by machinery, in a short space of time, at a comparatively small cost, and to an almost unlimited extent. The working of this machinery was exhibited on board the steamship *Wm. Tabor*, lying in the East River, at the foot of Nineteenth street, and its utility satisfactorily shown to the spectators. This novel invention does two things—it makes ice with the thermometer at at 90 degrees in the shade, and preserves meats and fruits for transportation. It accomplishes its purpose upon the chemical principal that if all the heat is extracted out of any object it becomes intensely cold. The ice is made in this way: a small steam engine, by means of two pumps, subjects carbonic acid gas to a pressure sufficient to liquidize it. In a liquid state this gas has lost its heat, but recovers it again when converted into gas. Accordingly a simple apparatus is contrived by which the acid in a liquid state is made to surround small tubes filled with water. The acid then returns to its gaseous condition, and in doing so takes with it all the caloric out of the water leaving it solid ice. There is no limit to the number of these tubes or apartments of water, and a large quantity of ice can be formed at a time. Yesterday about twenty tubes were filled and frozen to an arctic rigidity.

Upon the same principal air can be rendered cold and dry by being passed through these tubes while carbonic acid is regaining its heat, and then can be pumped into an air-tight chamber. In this chamber, thus filled with dry, frozen air, any meat, fruit, or perishable article can be placed and preserved.

This new process has been patented by Mr. T. S. C. Lowe, and a company formed to put it into practical operation. A vessel has been fitted up with air-tight compartments and ice-making apparatus, and the object of its owners is to proceed to Texas, buy meat there at almost nothing, and bring it to this market fresh and cool. In the tropics, too, by this process, ice can be made on the spot, and the luxury be accessible to all. The expenses of the vessel will be about $10,000 per annum; profits $860,000. At the close of the exhibition, Mr. Lowe invited the visitors, including members of the press, to a collation in the cabin of the vessel, and at the festive board he himself exhibited some curious experiments of the wonderful power of the carbonic acid in freezing any object. He took a bag full of the frozen acid, and by means of it froze mercury in a very short time; reduced two bottles full of champagne to the consistency of "sorbet," and passed it around to his guests; then he froze two eggs in two minutes to such a stony hardness that they rattled along the table like grape-shot.

A New Indelible Ink.—An excellent indelible ink may be prepared by rubbing up one drachm of aniline black with a mixture of sixty drops of concentrated hydrochloric acid and one and a half ounces of alcohol. The resulting deep blue liquid is then to be diluted with a hot solution of one and a half drachms of gum arabic in six ounces of water. This ink does not corrode a steel pen, and is affected neither by concentrated mineral acids nor by strong ley. If the aniline black solution be diluted with one and a half ounces of shellac, dissolved in six ounces of alcohol, instead of with the gum water, an aniline black is obtained, which, after being applied to wood stained black, brass or leather, is remarkable for its extraordinarily deep black color.

ON A METHOD OF CONVERTING THE SKIN INTO LEATHER.

By John Martin, Esq., Undergraduate in Medicine, Queen's University, Cork.

It becomes sometimes advisible in surgical practice to render parts of the surface of the body tense, and firmly pressed on to the subjacent tissues. This pressure is generally effected by bandages, strips of plaister tightly applied, direct pressure by weights, etc. But it does not appear that surgeons have hitherto adopted a more convenient and effectual method of applying pressure, when such is required, more uniform than great; namely, that of converting the cuticle into a temporary bandage. This may be done by forming a tannate of gelatine in the skin. Ordinary solutions of tannine applied to living tissues act astringently, by causing contraction of the blood-vessels, as is seen by the paleness produced in mucous membrane by such application. A very strong, or a saturated solution of this substance, however, applied to the external surface of the body, combines chemically with the gelatine of the skin, before reaching the vessels, forming a contracted impermeable layer of tannate of gelatine; it, in short, tans, or converts into leather, the superficial layer of the cuticle.

The practical application of this fact is sometimes useful, as in the affections presently to be referred to. These may be classed in five divisions, according to the *modus operandi* of the remedy. They are those in which its curative effects depend on (*a*) the *insensibility;* (*b*) *contraction;* (*c*) *impermeability;* (*d*) *contraction* and *impermeability* combined; (*e*) *removal of part*, of the skin which is caused by its application. As examples of these effects may be mentioned, (*a*) the relief of pain caused by external pressure on tender parts, as the integument covering abnormal projections of bone (as the spinous proces of a prominent vertebra, in Pott's curvature, for example), where there exists no corresponding natural thickening of the skin, or in bunions, relieving the abnormal sensibility of the part; likewise the prevention of bedsores of any kind, if applied at the commencement before the skin breaks. (*b*) The binding down of the subjacent parts by contraction and slight pressure, as for example, in weakening of the abdominal wall, and protrusion of the internal oblique muscle, by a long split in the external oblique, in the direction of its fibres (an occasional effect of falls from scaffolding etc.), too extensive for the truss; reducing an enlarged testicle, by first drawing the integument tense, and retaining it by means of a strap of plaister encircling tightly the cord, immediately above the gland, and applying the solution. (*c*) By its impermeability it checks and prevents unhealthy local sweatings. (*d*) By its early application it causes the absorption of matter deposited in the tissues, which may otherwise point at the surface. Its action, last mentioned in the above enumeration, (*e*) renders it useful in the treatment of cutaneous affections which depend on a local cause, as the layer which it forms peels off after a short time, removing, when they exist, such parasites as the *pediculous pulex pentrans, acarus scabiei, entozoon folliculorum, etc.* The strength of the solution of tannine required for the purposes mentioned is about six hundred grains to an ounce of water. It may be applied according to circumstances, by a layer of lint or wadding, ,saturated with the solution or by means of a brush.

There are three points which must be attended to in useing this remedy. *Cold water must be employed*, otherwise a solution of pyrogallic acid is used, not of tannine. *The solution must be quite recent*, and prepared in small quantities at a time; and *tannine employed must be perfectly fresh*, for, unfortunately tannine remains but a short time exposed to the atmosphere without being converted into gallic acid. It will be remembered that gallic and pyrogallic acids do not form *insoluble* compounds with gelatine.—*British Medical Journal.*

The New Chemical Laboratory of the University of Leipsic.—This magnificent building is not only the lagest chemical laboratory in Germany, but also in regard to its internal arrangement and conveniences for chemical analysis the most perfect. The corner stone was laid in August, 1867, and in November, 1868, it was opened for the reception of students. The building occupies some 7280 square yards, and in order to secure light and ventilation, has somewhat the form of a large E. It contains in addition to the residences of the regular corps of professors and assistants, 58 rooms, 34 of which are heated by means of a large steam-boiler in the basement. As a portion of steam is required for chemical operations, a smaller boiler is also provided for summer use. Over 800 gas jets will be used for chemical and illuminating purposes. The regular working rooms are six in number. These are abundantly provided with apparatus, and are capable of accommodating over 100 practical students. Besides these, there are a number of rooms arranged for special purposes, such as spectral analysis and photomatric experiments, organic analysis, experiments in physics; also a special chamber for dangerous operations, and another in the basement for furnace operations. In addition to this there is in each story a weighing room, and an apartment for each of the assistants. The auditorium will seat nearly 200 students. The arrangements for experimental instruction are such that each can have an unobstructed view of the operations of the professor. A special contrivance carries off the noxious gases and vapors, resulting from certain experiments. Directly adjoining the auditorium is the audience room of the resident professor, a chamber in which the assistants prepare the materials needed for the day's lesson; adjoining this is a large room containing the apparatus and numerous preparations needed in experimental research. Everything which human ingenuity could suggest for the simplifying of the laborious and time-consuming work of the chemist, is here definitely arranged in its proper place; and it seems almost impossible to realize when we look upon the harmonious whole, that such a gigantic enterprise could have been brought to a successful result in the short space of fourteen months. The present resident Professor is Dr. Hermann Kolbe, to whose untiring exertions and wise supervision the origin and completion of this magnificent structure is mainly due. M.

Foreign Objects in the Lungs.—A metallic tube composed of zinc and copper, one half an inch long and weighing eleven grains, was recently in a fit of coughing expelled from the lungs of a girl twelve years of age living in New York City. The tube, being the whistle of an india-rubber air ball, was two years ago accidentally forced into the upper part of the larynx, and thence, in the attempts to remove it by emetics, was lodged in the lungs. During the whole of the period mentioned, the girl suffered from an oppressive sensation on the chest and from continued coughing. During one of the paroxysms the tube was ejected. This occurrence gives a strong illustration of the remedial force of nature which is sometimes successful in affording relief when all the resources of surgery and medicine have been tried and failed.

Investigations into the Death of Julius Cæsar.—At a late meeting of the Paris Academy of Medicine, a curious paper was read, on behalf of M. Dubois, of Amiens, entitled "Investigation into the Death of Julius Cæsar." M. Dubois having looked up the various passages referring to this famous historic incident to be found in Dion Cassius, Plutarch, Suetonius, Appian, etc., and comparing them with one another, has fixed the spots where the four first wounds were inflicted, and the names of the conspirators who inflicted them. The first blow, struck by one of the brothers Casca, produced a slight wound underneath the left clavicle; the second, struck by the other Casca, penetrated the walls of the thorax toward the right; Cassius inflicted the third wound in the face. Decimus Brutus gave the fourth stab in the region of the groin. Contrary to the general opinion, Marcus Brutus, though one of the conspirators, did not strike the dictator. After the first blows Cæsar fainted, and then all the conspirators hacked the body. He was carried by three slaves in a litter to his house. Antistius, the physician, was called in and found thirty-five wounds, only one of which was, in his opinion, fatal: that of the second Casca.—*Medical Record.*

WOMAN'S BRAINS.

The *Lancet* says, in an article on women: We will not say anything about the smaller size of woman's brain, because we might be met with the objection that the size of this organ is related to that of the body, and by this standard the woman might fairly urge that her sex has an amount of brain relatively equal to that of man; although we think that men possess bigger and stronger heads for the same reason that they have stronger limbs—viz., that Nature has fitted them to do stronger work. But when we pass to the domestic and social relations of woman, to the emotional part of her nature, to her affections and instincts, and to the powerful influence which these exert on her, and through her on her husband and her children, no physiologist can doubt, we think, that there is a corresponding relation between the delicacy of the organization and character of woman's structure and that of her duties in life. If women are to marry and be given in marriage, and to bear children, we fear that these duties of life must form an insuperable obstacle to their becoming bread-winners and brain-workers in the same sense that men are; and, what is more, we conceive that it would be a very grievous thing for our children and ourselves if it were otherwise.—*Medical Record.*

UTERINE INJECTIONS.

At a recent meeting of the Imperial Academy of Medicine, the subject of uterine injections, which of late has occupied the attention of that learned body, was again briefly discussed, and MM. Gosselin, Depaul and Ricord condemned this method of therapeutics, which, despite the perfection of the instruments adopted, may determine an attack of metro-peritonitis, which, according to the declaration of M. Gosselin, has already occurred in the service of M. Jobert.—*L'Evenement Medicale.*

The *Pall Mall Gazette* states that the Russian Government has offered a prize of 3,000 roubles (£400) for the best history of Vaccination, by way of celebrating the hundredth anniversary of the introduction of that practice into Russia by the Empress Catherine II. The prize is open to all European competitors, and the history may be written in any modern European language.—*Lancet.*

TO A MAN WHO WAS RENDERED DYSPEPTIC BY LOSING MONEY.

You mourn too late the way your money went,
Tom's sharp, he borrowed, and you're flat-u-lent.
—*New York Med. Gazette.*

EARLY TREATMENT OF THE INSANE.

In the province of Westphalia the directors of the Marsberg and Lengerich Insane Asylums have ordered that native patients shall be subsisted free of cost during the first year of their malady. This is done in order that cases may be placed under treatment while yet in the initial stage. They claim to cure 80 to 90 per cent. of all cases admitted during the first month of the disease, fewer with every additional month, and assert that incurability is the rule after one year's duration. *Berliner Klinische Wochenschrift,* No. 26, 1868—[*Medical and Surgical Reporter.*

A READY STETHOSCOPE.

An ordinary kerosene lamp chimney, either straight or bulging, with the base placed to the chest and the top to the ear, makes a most excellent stethoscope, quite equal in sensitiveness to the manufactured instrument.—*Medical and Surgical Reporter.*

Dr. F. Hugenberger on the Treatment of Eczema.—The author states that this class of diseases is, as a rule, difficult to treat, that the use of arsenic internally is of no avail, and that remedies applied locally are frequently not well borne by the patient. What Dr. H. recommends for external application is an ointment composed of one part of diachylon plaster, and two parts of oil, or cod-liver oil, both of which frequently afford great relief, especially in the early stages. Warm bran baths, or baths containing a little of some alkali in solution, may be used, but with no greater advantage than the green soap, with flowers of zinc and white precipitate; neither of which methods of treatment are to be considered as effectual in preventing a relapse. To allay the itching, he used, with advantage, the local application of vinegar, and dusting with starch powder.—*Präg. Vierteljahrschrift—British Medical Journal.*

CONSUMPTION OF ALCOHOL IN THE UNITED KINGDOM.

The following will be found to afford accurate information as to the total quanty of alcohol consumed in this country in shape of ardent spirits, wine and beer—a subject which has lately engaged attention, and on which inaccurate statements have been made. According to the available data relating to this subject, it appears that the quantity of British spirits retained for use as beverage in 1868, amounted to 21,008,634 gallons, while the quantity of foreign spirits on which duty was paid amounted to 8,404,519 gallons, making a total of 29,413,153 gallons taxed at proof, or as containing 57 per cent. by measure of absolute alcohol. This would, therefore be equal to 16,765,495 gallons of absolute alcohol. The quantity of foreign wine imported was 15,151,741 gallons; and, taking the average amount of alcohol as 15 per cent. by measure, that would be equal to 2,272,755 gallons absolute alcohol. The quantity of beer for the same period was 895,639,356 gallons; and taking the amount of alcohol as 5 per cent. by measure on the average, that would represent 44,781,968 gallons of absolute alcohol. Altogether, therefore, the total consumption of alcohol would amount to 63,820,190 gallons of absolute alcohol, of which about 70 per cent. is consumed in the form of beer. On the assumption that one-third of the population are non-consumers, this would give an average consumption of about three gallons per head of absolute alcohol, or 1.31 fluid-ounce per head daily. The large proportion of the total consumption of alcohol that is drunk as beer is a striking illustration of the beer drinking customs of this country, showing an average daily consumption per head of about three-quarters of a pint of beer, containing nearly one fluid-ounce of absolute alcohol.—*British Medical Journal.*

The Zirconia Light.—The Paris correspondent of the *British Journal of Photography* gives the following account of this light, with which some parts of Paris are now illuminated:—"On Saturday evening I had the pleasure of seeing the experiment of lighting, by means of oxyhydrogen light, as applied to towns, etc. It was the third time I had been to the Tuilleries in order to see this illumination so that I could report to your readers, and I am able to report most favorably as regards the general effect. The most striking peculiarity of this light as perfected by MM. Tessie du Mothay and Marèchal, is its perfect steadiness and freedom from flicker. It was the first remark made to me by a bystander—'How steady the light is!' The zirconia cylinders or balls are placed inside the ordinary street lamps, and the jet of mixed gases plays upon them, the light although very brilliant, is not so painful to the eye as the electric light, and diffuses itself better. You see a globe of pure white light about the size of a large marble, perfectly steady, and throwing its moonshine rays all around. The contrast between the lamps lit up with this light and the ordinary gas jet is very striking in two particulars, and I had the opportunity of comparing them side by side. The gaslight is yellow, wavering, and flickering, and comparatively dull; the zirconia light is white, steady, no flicker, and brilliant. I have seen many attempts to introduce the electric light for lighting streets, etc., but it is too penetrating, and the light is blinding, even at a distance, to those who are making towards it; and everything, except in the rays of this light, are in total darkness. The effect is like that of a policeman's lantern, which enables him to see all before him, but which keeps him and his suroundings hid from all in front of him The zirconia light is free from this defect. The question is can the oxygen gas be procured cheaply enough, and this is asserted in the most positive manner."

Deaths from Chloroform.—February 14th, a chemist of Sheffield, named Godley, died under the administration of chloroform. He was about to undergo an operation for the removal of a piece of diseased bone from the leg; and, although he seems to have felt exceedingly nervous about chloroform, it was, nevertheless, at his own request that this anæsthetic was administered.

The patient's heart and lungs were examined prior to the use of the chloroform, and the quantity employed was exceptionally small; yet after inhaling for but three minutes, the heart ceased to beat, and the man was a corpse.—*Medical Press and Circular, Feb.* 24, 1869.

Obituary Record.—Died, in London, on the 13th of February, James Wardrop, Esq., F. R. S., Surgeon to George IV., in the 87th year of his age. This eminent member of our profession was well known by his "Essays on the Morbid Anatomy of the Human Eye," by his work on aneurism, and many other valuable contributions to the literature of our science.

In London, February, 7th, Joseph Hodgson, aged 81, well known by his valuable work on "Diseases of the Arteries and Veins," which obtained the Jacksonian Prize for 1811. He was one of those surgeons who has shed great lustre on the art and science of Surgery.

In Paris February 10th, in the 58th year of his age, Professor Grisolle, author of a classical monograph on Pneumonia, of a treatise on Internal Pathology, which has gone through ten editions. He was an able clinical teacher, and enjoyed a large practice, until three years since, when he suffered from a stroke of apoplexy.

English Statistics.—The Registrar-General's quarterly report of the United Kingdom, gives births, deaths, and resident population as follows:

During the three months ending December 31st, 1868, there were 252,700 births, and 158,299 deaths. The increase was 94,307, the native emigrant 23,872. The marriages were 106,470, ending September 30th from July 1st. The resident population in the Kingdom of the middle of 1868 was 30,369,845. Altogether 1,047,859 births, and 636,881 deaths were registered during the twelve months, thus making the natural increase 410,978 or 1177 daily. The recorded number of emigrants of home origin were 142,731 or 391 daily. The birth rate per 1000 of England proper was 36.31, and death rate 22.20, the rates are but very little above those of 1867.

Removal of the Hotel Dieu.—The Hotel Dieu, the oldest of the hospitals in Paris, dating from about the year 650, will soon be entirely removed from its ancient site, and the spot that it occupies will be converted into a splendid square facing the Cathedral of Notre Dame. The question of rebuilding the Hotel Dieu has been in agitation since 1772, when it suffered from an extensive conflagration, but the place to which it should be removed caused such differences of opinion that nothing was done. The contest was principally between the advocates of a central situation and on one of the outskirts of Paris. Within the last few years it was resolved to rebuild on the Isle de la Cité in the very centre of Paris, and a large space of ground was provided by the purchase and demolition of the old houses on the selected site. It is now reported that the new Hotel Dieu will be completed in 1869. Several of the ten pavilions which compose the hospital edifice have already reached to the height of a third story; all the others have two floors entirely finished. There will be eight court-yards between the different wings of the building, and the eastern and western sides are to be connected by a long gallery.

Mercury Fumes.—The dangerous action of mercury upon the health of laborers in looking-glass manufactories is well known. According to a recent investigation, however, it is shown that it is a mercurial dust rather than the sublimed vapor that produces disease. This dust can be prevented from flying by adding one-half per cent. of sodium to the mercury, which completely neutralizes any such tendency. The saving of the mercury more than equals the cost of the sodium.

Vaccination.—The prejudice against this simple method of protection against the frightful disease, the small-pox, does not seem to have died out. At Sheffield, England, recently, a respectable merchant was bound over on a charge of libel, for publishing a hand-bill, in which vaccination was asserted to be the mark of the beast spoken of in the Book of Revelations, and the Chairman of the Sheffield Board of Guardians of the Poor was described as another Herod, urging on the slaughter of the innocents.

Acupressure at the New York Hospital.—Since the first of December acupressure has been employed at this hospital, in two amputations at the shoulder joint, in two of the thigh and in one at the knee joint, with complete prevention of hemorrhage in every case. All the cases but one, which died of pyæmia, either have recovered or are in a fair way to do so.

REPORTS OF SOCIETIES.

ACADEMY OF NATURAL SCIENCES.

At a regular meeting of the Academy of Natural Sciences held on the evening, of the 5th ult, President Blake in the chair. Dr. W. F. McNutt was elected a member. Captain Edward Klink and L. A. Gould were proposed as members.

Mr. Kellogg presented a contribution to the cabinet, from W. Frank Stewart, of San José. It was accompanied by a letter from the donor, which was read to the meeting. The contribution consisted of a specimen of stalagmite of recent formation. Mr. Stewart, in his note, stated that it came from a cañon in the Mount Diablo range, a short distance from San José. The geological formation of this gorge or cañon he thought well worthy of the attention of the scientific. One of the most remarkable soda springs in the State was located there. Some years ago, a tunnel had been run into the hill by parties who were in search of coal. The enterprise was abandoned. Recently, the stalagmite, of which a sample was furnished, was found to have formed in the tunnel. Mr. Stewart believed it to be a combination of sulphur and carbonate of soda. The President of the meeting, after an examination of the specimen, concluded Mr. Stewart must be mistaken as to its combination. Dr. Gibbons thought there were no evidences of sulphur discernible in the sample before him.

A contribution to the library was received from Charles Crocker, Superintendent of the Central Pacific Railroad. It consisted of two packages of stereoscopic views of Indian inscriptions found on the rocks somewhere near Cisco. A vote of thanks to Mr. Crocker was passed, he not being a member of the Academy.

A contribution to the library was also received from the Royal Academy of France, consisting of a number of French books.

The Chair then stated that Professor Davidson would make a verbal statement to those present regarding his late experments by telegraph, to ascertain the longitude of San Francisco. Professor Davidson then explained at length the nature of his experiments, illustrating them on the black-board. Heretofore the longitude of any given place was determined astronomically or by the use of chronometers. These modes, although sufficiently correct for ordinary purposes, were not absolutely accurate. Professor Bache, with his quick perception, discovered, some years ago, that the telegraphic test would be more accurate than the astronomical. By this mode, the longitude of Heart's Content and Cambridge, as compared with Greenwich, had already been obtained. The speaker, in his late experiments, employed very delicate and ingenious apparatus for breaking the electrical current, etc., which he drew on the black-board and described. In making the complete circuit to Cambridge and back, he succeeded in transmitting a message from one table and receiving it at another, over a space of 7,200 miles, in .87 of a second. Subsequently he made the transmission in the twentieth part of a second. The exact difference in time between Cambridge, Mass., and San Francisco was found to be three hours and twenty-five minutes. In additional experiments, on Sunday evening, the operator transmitted a message through the circuit to Cambridge, and while delivering it, as it were, with one ear at one table, he was listening with the other ear to its return at the other table. It was the first time this feat had been performed over a wire 7,200 miles in length, and the operator jumped up from the table in profuse perspiration, originating from the excitement of the occasion. The electrical experiments proved that the former location of San Francisco, as to longitude, was correct, making the allowance of one second, the necessity of which was understood by those who had given the subject any attention.

The address of Professor Davidson was exceedingly interesting, although some portions were, of course, difficult to understand on the part of the uninitiated.

The Academy then adjourned until the next regular meeting.

AMERICAN MEDICAL ASSOCIATION.

The twentieth annual session will be held in New Orleans, Louisiana, on the 4th inst., at 11 o'clock.

CALIFORNIA ACADEMY OF SCIENCES.

The regular meeting of the California Academy of Sciences was held on Monday evening, the 19th inst. Capt. Edward Pennix and L. A. Gould, of Santa Clara, were elected members, and Mr. Herman Simon, Mr. Segret Simon, and Mr. Eugene Evenstine, were proposed for membership.

Several saline incrustations from Mono Lake were received as donations to the cabinet.

President Blake called attention to the stereoscopic views of Indian sculpture, which had been forwarded by Charles Crocker, Esq., of the Central Pacific Railroad. He said they looked as if they were made with some object, as there was a similarity between many of them; yet he thought they would be difficult to interpret.

Dr. Kellogg exhibited a singularly large and beautiful plant, very desirable for the florist, recently found by him on the San Joaquin river. It was a much larger and finer plant than either the *Leptosyne* or *Tuckermannia*, or their allied *genera*, with which it was nearly connected. He thought it would do away with those, and bring them all back to the old *Linean Coreopsis*. After reading a description of it, he proposed for it the name of *Coreopsis Californica*. He also found specimens of wild chicory, which might be used as an article of food as salad.

A letter from Mr. Stewart, of San Jose, was read, which gave an account of a remarkable exhibition of parhelia lately observed at that place.

Dr. Blake said the recent earthquake had not been noticed at Watsonville. He concluded that earthquakes were generally confined to one range of mountains at a time—sometimes along the Coast Range, and sometimes in the interior.

President Blake thought that hydrogen could be classed as one of the metals. It was known to lengthen wire by absorption, and when evolved from it by heat the wire would shorten.

After some further discussion on minor points the Academy adjourned.

Second Sight.—There recently died in Pensacola, Florida, an old colored preacher, known as "Uncle Jacob," about one hundred years old. He was present at and could distinctly remember the surrender of Cornwallis at Yorktown. A curious fact occurred in his case, the truth of which we have vouched for by a respectable medical gentleman there. It is that after many years of total blindness, this old colored man, over one hundred years of age, was astonished to awake one morning and find his eyesight fully restored—this occurred recently, and the old man retained his eyesight up to the hour of his death.

MEDICAL COLLEGE COMMENCEMENTS.

The Cincinnati College of Medicine.—The commencement exercises were held on Tuesday evening, February 16th. Graduates 28. Valedictory by Professor A. J. Miles.

The Medical College of Ohio.—The commencement exercises were held in Cincinnati, on Tuesday morning, March 2d. Graduates 70. The President of the Board, Judge Dickson, accompanied the conferring of the degrees with an address appropriate to the occasion, and the usual valedictory address was given by Professor Graham, his theme being, Faith in Medicine.

Miami Medical College, Cincinnati.—The ninth annual commencement took place Tuesday evening, March 2d. Graduates 48. Bishop McIlvaine, President of the Board, conferred the degrees, and made a brief and appropriate extemporaneous address. The valedictory was given by Professor Clendennin. It is to be published. At the close of the exercises, there was a pleasant re-union of the graduates, alumni and friends, at the residence of Prof. Richardson.

College of Physicians and Surgeons, New York.—Sixty-second annual commencement, Monday, March 1st. Valedictory address by Dr. James C. Lindsly. Graduates 87.

The Hospital prizes were awarded to Drs. J. Francis Chapman, Eugene B. Murtha and Fred. C. Curtis. The two Faculty prizes for the best graduation theses were taken by Drs. Eugene B. Murtha and John J. Reid, the former having written on the poisonous effects of the different species of Rhus, and the latter on Carbolic Acid and its derivatives. Honorable mention was made of theses by Drs. Lucius W. Bulkly, J. F. Chapman, Thomas Trenaman, Sherman Chapman, and George Hickok. The proceedings closed with a humorous address by Joseph H. Choate, Esq.

Medical Department University of New York.—Commencement Tuesday evening, March 2d. Graduates 82. Eleven graduates received certificates of honor. The diplomas were distributed by Chancellor Ferris—from whose hands many thousand graduates have received this distinguished honor—and the valedictory was given by Prof. Thomson.

Bellevue Medical College, New York.—This, though one of the youngest, is far from being least among the medical colleges. The commencement was held on Tuesday evening, March 2d. Graduates 124. The class was addressed by Rev. Alex. R. Thompson. Dr. Walter S. Thorne was the valedictorian of the class. Full lists of graduates in the New York Medical Colleges can be found in the *N. Y. Medical Gazette* of March 6th.

Woman's Medical College, Philadelphia.—Seventh annual commencement, March 10. Graduates 15. Prayer by Rev. Albert Barnes; address by Judge Peirce; valedictory by Prof. B. B. Wilson.

Harvard University Medical Department.—A programme of the order of exercises of the commencement on Wednesday. March 10th, is before us. Prof. Bigelow conferred the degrees. The address was by Prof. Ed. H. Clarke. Ninety-eight graduated, including those who received their diplomas last July. Six of the members graduated in dental medicine.

Jefferson Medical College, Philadelphia.—Commencement exercises at Musical Fund Hall, Friday, March 12th. Graduates, 126. Valedictory by Prof. Samuel H. Dickson, on the Progress of Medical Science.

University of Pennsylvania.—Commencement exercises at the Academy of Music, Philadelphia, Saturday, March 13th. Graduates, 130, including two diplomas given at the June commencement, 1868.

Valedictory address by Prof. Alfred Stillè.

Buffalo Medical College.—Commencement, Feb. 24th. Graduates, 34. Address to Graduating class by Prof. T. R. Rochester. Valedictory by Robert A. Patchin, of the class.

Rush Medical College, Chicago.—Commencement exercises ———. Graduates, 108; *ad eundem*, 4; honorary, 1. Address to the Graduates by Prof. J. V. Z. Blaney. Valedictory by Prof. J. P. Ross.

Washington University, Baltimore, Md.—Commencement, Feb. 22d. Graduates, 80. Valedictory by Prof. Charles W. Chancellor.

Kentucky School of Medicine.—The Annual Commencement of the Kentucky School of Medicine took place in the lecture-room of the school, in Weisiger Block, Feb. 23d. The exercises were opened with prayer by the Rev. Mr. Hobson, when the Dean read the annual report, showing the school to be in a better and more prosperous condition than ever before in its history. W. R. Thompson, Esq., one of the Regents, then in a brief speech conferred the diplomas on the members of the graduating class:

The University of Louisville.—The commencement took place March 2d.

The class of the present session numbered two hundred and twenty-three, of which number, seventy graduated.

MEDICAL SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 26th, 1869.

S. Solly, Esq., F.R.S., President, in the Chair.

REMARKS ON THE NATURAL HISTORY OF RHEUMATIC FEVER.

By William W. Gull, M. D., and Henry G. Sutton, M. B.

The discussion on this paper was resumed.

Dr. Daldy wished to know what was meant by "rheumatism," and what by "rheumatic fever." He would like to abolish the word rheumatism altogether, including, as it did, several conditions, such as neuralgia with swelling of the joints. By rheumatic fever was generally understood the lithiasis, for which the elder Dr. Warren had said that six weeks was the treatment. The so-called sub-acute rheumatism was really a form of remittent fever *plus* rheumatism. Many of the cases mentioned by Dr. Gull as cases of rheumatic fever were not examples of rheumatic fever at all, but of a remittent fever, with associated local conditions, and having a course of from fourteen to twenty-one days.

Dr. Handfield Jones said that there was importance in the remark that rheumatic fever was not an uniform condition. There were many other instances, such as epilepsy, neuralgia, etc., where the phenomena were liable to mislead; and the mere phenomenal study of disease was insufficient as a guide to treatment. The pathology of rheumatism was not known; and its treatment was altogether empirical. Some rheumatic fever patients excreted much acid and received relief and benefit from alkalies; while in other cases with articular manifestations there was an excess of alkali, and here large doses of quinine did good. Again, some cases (but not all) derived benefit from the application of blisters, though they were not cured thereby. It was necessary to exercise discretion in selecting the proper treatment for a case of rheumatic fever. There was only one definite fact: that the production of much acid is a definite indication for

the use of alkalies. It ought to be asked whether what is called rheumatic fever was one disease or a variety of diseases.

Dr. Wynn Williams said that the discussion had diverged a little from the original question—whether rheumatic fever was benefited or not by medicines. He had had several attacks of rheumatic fever, and had tried both the "do-nothing" and the alkaline systems of treatment; and was led to strongly recommend the alkaline plan. When there was effusion in the joints, alkaline lotions with laudanum, applied hot, gave much relief. His remarks were based on an extensive experience among country patients.

Dr. Wilks was more or less in accord with the authors, and thought that Dr. Handfield Jones was much of the same opinion. He had had a large experience in rheumatic fever, but he did not know the remedy for it. He had used all the various means recommended; and it was remarkable that all remedies were almost equally successful; he did not find that any were of no use. There was no one plan of treatment to be used successfully in all cases. The cases to which he referred were of rheumatic fever as the term is generally understood. The fact of a paper such as that which had been presented being brought forward, was of some importance. Four or five years ago, there was a discussion on the treatment of rheumatism; and if a non-medical writer to the Society had then suggested that rheumatic fever patients might recover without medicine, none could have contradicted him. But now by obtaining a knowledge of the natural history of the disease, physicians were on the road to its proper treatment. He did not believe that the cases described by Drs. Gull and Sutton were cases of remittent fever. He considered the reading of the paper, as a contribution towards the natural history of the disease, an important fact in the annals of the Society.

Dr. Billing had hoped that Dr. Wilks would have given his opinion as to the value of the mint-water or "do-nothing" treatment of rheumatism.

Dr. Sibson would ask whether that treatment could be called "do-nothing" which consisted in keeping a patient in bed, supplying him with proper food, and guarding him from injury? A treatment based on the strict observation of facts, and excluding all distinctly foreign elements, was doing more than giving alkalies, lemon-juice, or other drugs. Nothing was more easy than to prescribe on paper; but the physician must labor in constantly watching the patient and protecting him from harm. Behind all the various methods of treatment there was a common measure; and this was the rest, care, and nurture in hospital. During the last two years and four months, he had treated rheumatism without internal remedies, but with a care, attention, and nursing which he had never before bestowed on his patients. He had been led by observing relapses in consequence of allowing patients to get up too early, to keep rheumatic fever patients in bed for some time after they were free from pain; and this was a most difficult matter to carry out. Patients would get up and use their limbs, and consequently had relapses. In his treatment he aimed at securing absolute rest from movement. The patient was kept in bed, with the affected limbs wrapped in cotton-wool; and a cradle was placed to relieve him from the pressure of the bed-clothes. He studied to relieve pain in every possible way in which this could be done. He applied belladonna liniment to the joints; placed a pillow under the foot to prevent it from hanging down, etc. He did not think that this "surgical watching" of the patient could be called "do-nothing" treatment. Mr. Hilton had called attention to the importance of rest in surgery; and it was of equally great importance in the medical treatment of disease. In speaking of the shortness of acute symptoms, we lost sight of an important fact. The great point was, to observe what tendency there was to inflammation of the fibrous structures of the heart. There could be no question that the valves and cavities of the heart were most worked, and more liable to become affected; hence the value of rest and withdrawal of pressure. If there were much pain in the joints, with inflammation, he applied a few leeches; if there were no inflammation, a little morphia was injected sub-cutaneously. Regarding the use of peppermint-water, he was not sure whether it was right to pretend to give medicine. He had given medicine only for special purposes for more than two years, except, during convalescence, a little iron with quinine; and his patients were well pleased to be relieved from taking medicine. His mind was, however, not made up as to which was the best treatment of rheumatism. This had yet to be proved. We must go carefully and earnestly into the enquiry, and treat patients, not symptoms alone.

Dr. Billing said that giving mint-water was doing nothing. Even Dr. Sibson's treatment, as described by him, was not in all respects mild; he used leeches, morphia injections, belladonna, etc. The management of the patient, as described by Dr. Sibson was the work of a nurse. Various modes of treatment were useful at different times.

Dr. Anstie said that the alkaline treatment of rheumatism had been regarded as a great boon, and there was a mass of evidence in its favor, which it was hard to get rid of. But before this plan was given up (though he had lost much of his faith in it) he would have its effects more carefully tested. He believed that it had fallen into disrepute with many practitioners from its effects not having been properly observed. A friend who was a very careful observer, had assured him that he took care to ensure alkalinity of the urine, and that his treatment was very successful. He thought that leeching might be discarded in all cases, and that small sub-cutaneous injections of morphia would be sufficient.

Dr. Leared would ask whether there was an essential acid in the blood in rheumatism. If it were lactic acid, there was a rational explanation of the relief afforded by alkalies.

Dr. Reginald Thompson spoke of the results of treatment of rheumatic fever at St. George's Hospital. In 1866 and 1867 there were 100 patients admitted, of whom 48 had heart-complication on admission, 21 became affected during their stay in the hospital, and 31 remained free. The average duration of the stay of patients in hospital was in 1866, 22 days, and in 1867, 26 days. The average duration of the cases with pericarditis was 46 days.

Dr. Habershon thought that Dr. Sibson's remarks on the importance of relieving pain deserved much attention. It could not be said of the measures used for the purpose—such as belladonna, opium, conium, etc.—that they cut short the rheumatic process. The great tendency to relapse has been overlooked in speaking of the natural history and treatment of rheumatism; and he was led to ask whether the means previously used had not induced in patients a greater liability to relapse, and whether patients who were kept in the best position for the remission of the disease were not less liable to relapse than those who had been treated by alkalies or other remedies. He thought that alkalies, when given freely in large doses, produced changes in the blood, and rendered patients liable to come again under treatment. Observations ought to be made not merely on a few cases, but

for a long time, if we would estimate the value of different plans. He thought he had seen much harm done by large doses of alkalies.

Dr. Dickinson, when registrar at St. George's Hospital, had witnessed cases treated in different ways. In 110 patients treated by various remedies, 35 had endocarditis or pericarditis after the commencement of the treatment. At the same time 47 cases were treated with large doses of alkalies (rendering the urine alkaline), and of these there was only one in which heart disease was discovered. The alkaline treatment would be, of course, given only in cases attended with much acid. He asked Dr. Sibson how many cases of heart-disease he had had among his rheumatic fever patients during the last two years.

Dr. Sibson replied he could not give the exact statistics, but that the number was smaller than in any previous similar period.

Mr. Macilwain called attention to a law of disease which he had observed, in reference to the connection of the site of disease and the interference with the general system.

Dr. Sutton said, in reference to the stay of the patients in hospital, that this was not given in the paper, because in some cases the patients had been kept in hospital both by Dr. Gull and himself beyond the usual time. The diagnosis of the disease was not always easy; but the patients referred to by him and Dr. Gull were mostly females, aged about 19. He could say that all the cases were examples of rheumatic fever—there were certainly none of a gonorrhœl character. The detection of heart disease was difficult; often, the only sign to be detected by careful examination was a "leather-creak" in the second costal interspace, which, when watched from day to day, might be observed to become developed into the ordinary pericarditic friction-sound. Dr. Dickinson's statistics showed that there was a tendency for the heart to become affected during the first week. He could not understand Dr. Daldy's remarks about remittent fever. In reply to a question from Dr. Reginald Thompson, he said that no relapse had occurred in any of the cases. The patients were kept in hospital until the temperature had been normal for two or three days, and the specific gravity of the urine had fallen considerably.—*British Medical Journal.*

SURGICAL SOCIETY OF IRELAND.

February 19th.

Hamilton Labatt, Esq., F. R. C. S. I., in the Chair.

Mr. Maurice Collis exhibited casts, photographs, and morbid specimens, illustrative of three cases of Myeloid Tumor of the Antrum. In all, he had been able to remove the growth by limited incision, and had preserved the floor of the orbit. In two, the hard palate and teeth had been preserved. In one, the teeth had to be sacrificed, but the muco-periosteum of the hard palate was preserved, and, being brought into contact with the reflected membrane from the cheek, had united with this and a very efficient septum was established between the cavities of the mouth and nose. Mr. Collis advocates a line of incision through the ridge which divides the filtrum or central portion of the lip from its lateral portion. This ridge is more or less curved; hence the cicatrix is less observed than when made in the mesian line, and the incision avoids the very thick tissues which lie at the junction of the septum, narium and lip. One of these patients was operated upon on July 1st, 1868. In a photograph, taken on the 10th of the same month, the line of incision was scarcely perceptible. The material used for suture was horsehair, softened in warm water or liquor potassæ. Its advantages are: facility of tying and absence of kinks when removing, also that it may lie any period in the tissues. In one case, some wire had also been used, and the marks and thickening of the tissues in its track remained much longer than in the case of the horsehair. Mr. Collis is a staunch advocate of conservancy in these antral tumors, and never sacrifices the palate, teeth or floor of the orbit, where they can be saved with safety. The paper elicited much interesting discussion. Mr. Collis presented the specimen and a large book of photographs illustrative of operations about the face, to the College. This book was exhibited at the Oxford meeting, and created much interest, as did also the lines of incision for removal of these tumors which Mr. Collis advocated.—Dr. Mapother agreed with Mr. Collis in regarding the lines of incision advocated by him as a great improvement in these operations; but, in justice to the memory of the late Mr. O'Ferral, he was bound to say that Mr. O'Ferral had, some years ago pointed out the value of this improvement. He thought it gave so much more room for the subsequent steps of the operation, that it could not fail to meet with general adoption.—Mr. Hargrave had the pleasure of being present at an operation by Mr. Wharton, for the removal of a tumor from the upper jaw, performed according to this method, and he was astonished to observe the rapidity with which recovery took place. He advocated the use of the actual cautery at a white heat to check the hæmorrhage from some of the small arteries in these cases, and he considered the gas cautery but a very imperfect substitute for the old but highly valuable potential cautery.—Mr. Croly had removed a myeloid tumor by a single incision. He thought it did not matter whether this passed through the mesian line or not, as there was remarkably little deformity in these cases. He agreed with Mr. Liston in condemning "grubbing operations" about the upper jaw, and thought that there would be great fear of a return of the tumor where the palate processes of the superior maxillary and palate bones were not removed. He was in favor of removing the entire jaw, or not operating at all.—Mr Wharton thought that, unless there were certain evidence of implication of the bones composing the palate, they ought not to be removed; it would be time enough to do so when they became diseased.—Mr. Collis was glad to find that he was not the first to advocate the operation. He was content to follow the advice of Mr. Fergusson respecting what had been termed "grubbing operations," and preferred it to that of Mr. Liston, who was notoriously a "slashing operator." He thought the gas cautery was useless where any mass of heat was required; and as they could easily remedy the effect of radiated heat from the actual cautery by protecting the surrounding parts, he thought the latter was highly valuable in checking bleeding.

Mr. Stokes wished briefly to draw the attention of the Society to some points of interest connected with the treatment of Hernia after operation for the relief of strangulation. He detailed the case of a man aged 24, who had been ruptured five years last August. The hernia, which was femoral, became strangulated, but was reduced under the influence of chloroform; there remained a fullness indicating that the sac was not reduced. On January 21st, it again became strangulated, and it was anticipated that there would be no difficulty in reducing it. But the most careful taxis failed even after the use of the warm bath, opium, or tobacco-fomentation and an emollient enema. The symptoms of strangulation continuing, the extra-peritoneal operation was performed, the neck of the sac having been detached from its

connections, and a director was passed into the abdomen outside the sac. The hernia was reduced without opening the sac. Opium was administered for two days, when it was discontinued, as there were symptoms of narcotism. There was no motion of the bowels for seven days, at the end of which time a warm water enema was given, after which there was daily action of the bowels. The wound healed by the fiast intention without the so-called antiseptic treatment. He wished to have the benefit of the experience of the Society respecting the use of purgatives after operations for hernia. He was aware it was the practice of many London surgeons to give a purgative the day after the operation. During his pupilage, he had witnessed the use of calomel purges in many instances; it was the practice in Paris, when the mortality in these operations was unusually high, to administer an active cathartic draught the next day. He regarded the practice as bad, and thought it should be abandoned.—The subject was discussed at some length by the Society, and the unanimous opinion was that the use of purgatives was injurious, and had been in great measure discontinued in the Dublin hospitals.

CASES OF MALFORMATION OF THE EYE AND EAR —ANOPHTHALMOS.

REPORTED AT A MEETING OF THE CHICAGO MEDICAL SOCIETY.

Dr. Holmes reported two cases of congenital absence of both eyes, which had very recently fallen under his observation. The reporter stated that such cases were exceedingly rare, even in the aggregate experience of oculists.

One of the infants, a female, of German parentage, was born January, 1868. The parents were perfectly healthy, as also were two other children. They could ascribe no cause for the abnormal condition of their last child.

With the exception of the absence of the eyes, and an abnormally narrow palpebral tissue, the child, as far as could be observed, was strong and perfect. When it was at rest, one could scarcely remark any thing unusual in its appearance. The brows were very full, the cheeks high. The orbits were not large enough to fairly receive the tip of the fore-finger. On passing two probes into either orbit and separating them, the edges of the lids, not more than the fifth of an inch in length, could be seen at the depth of nearly half-an-inch, in the small, conical cavity of the orbit. Between the lids mucous membrane could be seen, but no trace of a globe except in the left orbit, in which was a minute, reddish elevation behind the lids.

The child grew well till July, when it was attacked with cholera infantum, and died after a few weeks.

The second case, also a female, under the care of Dr. H. M. Lyman, presented almost precisely the same appearances. There was however, a malformation of the nose, in two respects. There was a slight triangular deficiency of the outer wall of the right nostril, near the tip of the nose. The nose was not placed exactly in the median line of the face, but obliquely towards the left side. There was, also, a peculiar ridge extending from the nose obliquely upward and to the left, over the left os frontis. In other respects the child, a first-born, was perfect. The parents, American, could give no cause, even imaginary, of the deformity, *congenital absence of the external meatus.*

Dr. Holmes also reported two cases of congenital absence of the external meatus, which he had observed during the last three weeks.

A girl, eight years and three months old, of German parentage, was brought for advice regarding her hearing.

She was pale, and presented a very peculiar expression of the face, the head being exceedingly thin; the external wall of each orbit being deficient far towards the ear. There was also a deficiency of the orbital border of the superior maxillary bone, of the malar bone and zygoma. The lower jaw was somewhat receding; the teeth were irregular, but not notched. The roof of the mouth was abnormally arched. The right ear presented the following peculiarities: There were, externally, simply the lobe and mere rudiments of the upper portion of the pinna, and of the tragus and anti-tragus. There was not a trace of an external meatus.

The left ear presented precisely the same appearances, although the rudiments of the external ear were somewhat differently arranged.

The patient could understand loud conversation, but was so diffident that it was impossible to determine the distance at which she could hear a watch. The hearing was improved by opening the mouth.

In less than three weeks after this patient consulted Dr. H., a German lithographer, twenty-three years of age, sought advice in reference to his myopia. He remarked during the examination that he had no right ear, There was the same condition as in the case just described. The pinna, however, was somewhat extensively developed. The hearing was more deficient than in the preceding case. He could not hear a watch placed over his ear.

Dr. Holmes also reported the case of a little girl, one year old, in which there seems to be a congenital paralysis, or possibly an absence of the levator muscle of each upper lid. The palpebral fissure is abnormally short, the globes themselves being remarkaby small. The lids appear almost absolutely closed. No known injury occurred to the child, either at or after its birth. She is healthy and vigorous, with no other peculiarity in her formation. Vision is acute, as shown by the manner in which the child sees and seizes minute objects.

The head is invariably thrown back whenever the child attempts to look at any thing. This seems to cause the lower lid to fall a line or more from the upper lid. As there is scarcely the slightest motion to the upper lids, it is doubtful how much benefit could be gained by surgical treatment, without danger of inflammations from exposure of the cornea to the action of dust and the atmosphere.

EXOPHTHALMOS.

Dr. H. recalled the attention to the patient with enormous exophthalmos whom he presented to the society some time since, stating that he now has, under his care, a patient afflicted with the same form of congenital disease.

The eyes were also enormously protruded from the orbit; the right one to such an extent that the lids, though greatly hypertrophied and distended, no longer covered the cornea. The motions of this eye were much impeded; those of the other eye nearly normal.

In consequence of an injury of the right cornea, and long continued exposure to the atmosphere, the vision was already destroyed. There was great pain in the eye, sympathetic irritation of the cornea in the other eye, to relieve which symptoms the right eye was extirpated.

The refraction and accommodation of the eyes had always been normal.

After the wound caused by the extirpation healed, the lids remained nearly as prominent as if closed over a normal eye.

The patient stated that his father, brother and sister, were born with the eyes abnormally prominent, although the brother's eyes became especially affected at the age of fifteen. The appearance of the brother's would naturaliy suggest the thought that they were suffering from Graves' (Basedows') disease. There were, however, no evidences of anæmia, or of disease of the heart or thyroid gland.—*Chicago Medical Journal.*

ARMY AND NAVY NEWS.

ARMY CHANGES.

By direction of the President, Brevet Brigadier-General R. S. Satterlee will remain on duty as Chief Medical Purveyor in New York City, and Brevet Brigadier-General Charles McDougall will remain on duty in St. Louis, as Assistant Medical Purveyor.

Brevet Colonel James Simons, Surgeon, has been relieved of duty as Medical Director of the First Military District, and ordered to Baltimore, where he will await orders.

Brevet Colonel John Moore, Surgeon, has been relieved of duty in New York, and ordered to report to the commanding officer of the First Military District, for assignment as Medical Director.

Since writing our editorial on "Medical Graduates," we have seen a communication from a medical gentleman at White Pine, from which we extract the following:

"I am much disapointed with this dist. regarding a physician chance at the present time. There is more Dr her than would patch H— a mile. If the were doctors but the most of them is quacks and humbuggs—the advartise strongely and get what ever paying practise there is going in fact there is but little money in this country and what is the rich men has it all and when the are sick the goo to San Francisco."

REVIEWS.

Clinical Lectures on Diseases of the Urinary Organs. Delivered at University College Hospital. By Sir Henry Thompson, with illustrations. Philadelphia, Henry C. Lea; San Francisco, A. Roman & Co., 1869.

It is really a treat and a pleasure to meet with such a book as this, and one that is rarely met with. It is a book in which the author shows that he is master of his subject, and he has the faculty of telling what he knows in a clear, concise, intelligent way. And that he does know the subject that here is handled so ably, as well, if not better than most men, the high position that he holds in professional estimation is a sufficient guarantee. The most valuable lectures are those on Stricture, Hypertrophy of the Prostrate, Stone, Lithotrity, Lithotomy and Cystitis.

Regarding solid and flexible instruments in the treatment of Stricture, our author confesses to treading on delicate ground, and he tells why as follows:

"First of all, no one has been a greater advocate than I was some years ago of solid instruments, as against soft ones, influenced by the traditions of this place, (the London University Hospital) which are entirely in favor of the former. I can give you the reason for that. The great master-spirit of this place, who has been dead some twenty years or more, the man who gave tone to the place, and educated almost all the elder men here—I mean Liston—declared his preference for the solid instrument in very strong terms. It is (1867) just twenty-one years ago since I sat in this room and heard him deliver a lecture on that very subject. His powerful advocacy of the silver instrument, and the contempt he had for all others, were matters of notoriety. Starting then with such views, and regarding him, as every one does to a certain extent, the man who teaches him well and fairly what he learns, for a certain time as an oracle, I was strongly in favor of the solid instrument. But what is much more valuable than any oracle, whoever he may be, is a large personal experience; and this has taught me that, beyond all question, the flexible instrument is the best—if only you know how to use it—for the treatment of Strictures and for all maladies of the canal whenever it is available. I am so certain of this that I have no hesitation in saying, that a great part of the success of any man who has much to do with this subject, will depend upon his use of the flexible instruments as against solid."

Our space forbids our giving extracts from the excellent directions given for passing an instrument through a very narrow stricture, he however says: "*Under no circumstances whatever should force be used in the introduction of an instrument through a stricture or into the bladder.*"

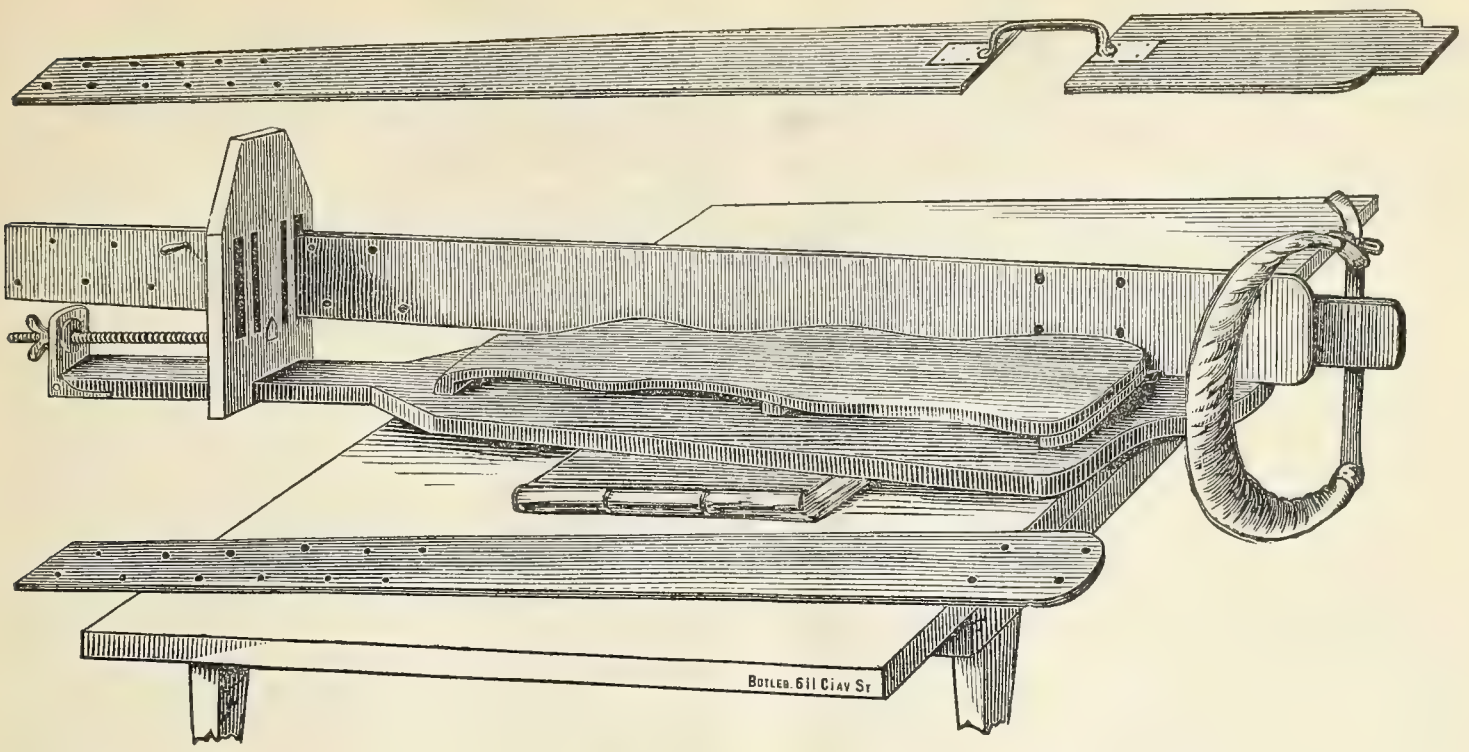
Sir Henry Thompson is the most successful Lithotriptist in London, and we therefore expected a good chapter on this subject, but his clearness of description and systematic attention to every important detail surpassed our anticipations.

A History of the Medical Department of the University of Pensylvania, from its foundation in 1765, *with sketches of the lives of deceased Professors.* By Joseph Carson, M.D., Professor of Materia Medica in the University. Philadelphia, Lindsay & Blakiston; San Francisco, A. Roman & Co., 1869.

This is a book which certainly will be hailed with much pleasure by all the living graduates of this honored University, inasmuch as it is not only a history of the rise and progress of the medical department of the University, but it contains a very interesting biography of the various professors, whose names have given it lustre, and whose memories are revered by hundreds whose first professional steps were directed by these distinguished men.

Treatise on the Diseases of the ear, including the Anatomy of the organ. By Auton Von Tröltsch, M. D., professor in the University of Wärzburg, Bavaria, Translated and edited by D. B. St. John Roosa, M. A., M. D. William Wood & Co., New York; A. Roman & Co., San Francisco.

We are glad to welcome a second edition of Dr. Von Tröltsch's able work on Otology. Aural Surgery has not, up to the present time, met with that attention from the general profession that its great importance demands, and yet we have the excellent works of Itard, Pilcher, Wilde, Toynbee, and the one now under notice, the first edition of which appeared some seven years ago. The consequence of this neglect is, that the treatment of deafness and other diseases of the ear, has fallen into the hands of pure quacks and broken down degenerate members of the profession. We really see no reason why this should be so, why the offending ear should be less meritoriously treated than the offending eye. Common sense and ordinary judgment declaim against it, and those of your readers who feel that they have neglected this branch of medicine—and we should want the lantern of Diogenes to find the man who has not—to them we say: "It is never too late to mend." Get this work of Von Tröltsch, work it up, master its contents, and you will thank us for our advice.



IMPROVED APPARATUS FOR FRACTURES OF THE THIGH.

ARTHUR B. STOUT, M.D., SAN FRANCISCO.

An attempt to offer any improvement or acceptable modifications of the different instruments used in the treatment of fractures of the thigh-bone, would appear superfluous to readers of books upon the subject. Dessault, Liston, Cooper, Baudens and others seem to have exhausted ingenuity, and the variety of patent instruments looks so inviting and complete that nothing remains to be desired. And yet, the surgeon who has to encounter the variety of incidents and accidents which beset him in the long, the tedious, and often baffling treatment of these fractures, will acknowledge that none of them fulfil all the requirements which present themselves.

The incentive to this publication is the hope that the modifications suggested, after several years experience, may prove useful.

The first capital requisite in the treatment of fractures of the thigh, is to establish a firm, broad basis, on which the mechanism to be employed may rest, so that the occasional changes of level in the mattrass may not affect the limb. The whole member should be as nearly as possible isolated. This indication is sought to be supplied in the solid, broad, inch-thick board of oak, which forms the foundation of the apparatus. All the patent instruments so ingeniously contrived, fail, in their want of stability. As immobility is the demand, the slightest movement may retard or defeat the object.

The second important requisite is the isolation of the limb in such a manner that all its parts may be easily accessible and visible, without disturbance of the entire member, as a whole.

The object herein is to obtain facility in all the dressings and changes of bandages during the protracted treatment of a fracture of the thigh-bone. For this purpose a platform is made upon the baseboard of the apparatus, raised one-half or three-quarters of an inch higher than the latter, and strongly attached to it, as seen in the plate. The platform is narrow at the ankle, broad at the calf of the leg, compressed again at the knee joint, and spreads out broad again where the thigh is to rest. It is somewhat shortened at the foot, in order to leave a depression for the heel. This platform is invaluable in lifting the limb free from the bedding and permitting alterations and renewals of bandages and dressings, without shaking or in the least jarring the fracture.

A prolongation at the end of the baseboard, say 9x1½ inches wide, serves to receive on its extremity the brass piece which is the fulcrum of the extension force. A long brass screw attached to the foot-piece and passing through the fulcrum, is acted upon by a screw nut at the end, and procures the necessary extension.

Careful inspection of the accompanying excellent wood cut, by Mr. Butler, will better explain this contrivance than pages of description.

The foot-piece slides on the prolonged extremity of the baseboard, and is moved to and fro by the screw. It is pierced with four slots, the two inner ones to receive the extension straps, and the two outer for the splints.

The counter-extension or perineal band is a strong buckskin pad, with a buckle and strap. On the strap is attached the firm leather cap or socket, three inches deep, which receives the long extension splint. With an adjustment of this kind, it becomes easy at any time during the treatment to open the dressings and review the fracture without disturbing the position of the limb. The perineal band may be removed, if necessary, and be replaced by a clean one. In applying the long extension splint, its lower end should be first passed into the slot of the footpiece, its upper extremity then enters easily into the leather cap of the perineal band. The short splint is for the inner side of the thigh. Both splints are pierced with large holes to receive the various bands used to adjust the ends of the fractured bone.

The plate shows an extension splint which has been cut across, and reunited by a strong brass or iron rod. This splint is for use in fractures with an open wound, which requires daily dressing. It affords free access to the wound, without derangement of the general apparatus. The uniting rod on the splint must be strong enough to bear without

springing, the force of the counter-extension.

The prolongation of the upper end of the baseboard gives additional stability to the apparatus in the bed, and affords a rest for the extension splint; but where it is inconvenient to have two instruments for the right and left side of the body, this end may be rounded off.

When the extension straps have been adjusted to the foot, and the limb has been properly swathed, it is laid upon the platform, already padded to suit the form of the leg. The fracture may then be as nearly adjusted as possible.

It will be now apparent that a broad band passed around the lower part of the thigh just above the knee, and between the platform and the baseboard, will seize the limb in the contracted part of the platform, and hold it perfectly still and firm during the subsequent manipulation of setting the limb with precision. The curves in the platform permit the limb to be held when the proper degree of extension is obtained, and thus divide the strain of the extension. In fact, with bands thus applied, fixing the limb to the platform, the extension force may be temporarily entirely removed, without fear of the limb contracting or the fracture displacing, if any new adjustment of the splints becomes necessary.

The limb being thus arranged upon the platform, the extension splint can be applied and the fracture be set with precision. Between the platform and the baseboard bands may be passed without exertion and without shaking the general adjustment. Side loops or slings can be secured through the holes in the splints, in cases where the ends of the fractured bone are disposed to deviate laterally. Where there is an open wound the dressings may be renewed without opening the apparatus. In a word, during the whole treatment of the fracture, the limb is accessible in all parts, and may be daily inspected without pain or annoyance to the patient, and very little loss of time to the surgeon.

TREATMENT OF ACUTE RHEUMATISM.

BY O. O. BURGESS, M.D.

Manifestly the great object of treatment in this disease is the prevention of cardiac complications. There is no lack of remedies which have proved eminently successful in relieving the fever and inflammation and abridging the duration of the disease; yet the fact of the thousands who die annually from cardiac disease, is cited as proof, that the profession has not yet discovered that treatment which will bring the patient through without implication of the heart.

From a recently published report of the treatment of Acute Rheumatism in the principal British Hospitals, it appears that there, as among the practitioners of this country, the alkaline remedies have gained the greatest share of confidence at the hands of the profession. But, while Dr. Fuller, of St. George's Hospital, claims that the heart, may be regarded as safe from attack after the patient has been under the alkaline treatment for twenty-four hours, no less an authority than Dr. Wilks, of Guy's hospital, says: "that it is by no means yet determined, that absence of articular symptoms, implies the less liability to cardiac disease; or that, after the administration of these remedies which are supposed to shorten the disease, the heart has more readily escaped." He had had lately two patients who were taking half a drachm of the bi-carbonate of potash every three hours, with the effect of rendering the urine alkaline. and lessening the pain in the joints, in about two days, and yet acute pericarditis appeared in both patients on the third day. He had fully tried all the various methods of treatment, and his difficulty was, not that they did not succeed, but that they all sometimes failed; and, while he could endorse the statement made by enthusiastic supporters of each particular remedy, he still entertained a doubt as to the best method of treatment.

The results of the alkaline treatment, however, as administered by Dr. Fuller, presents a more favorable picture; and as regards both security from heart-implications and duration of the disease, are better than those of any other of the hospitals reported upon. In December, 1862, Dr. Fuller stated that his experience embraced, up to that time, one hundred and ninety-four cases, and that in no single instance had any heart affection occurred after the patient had been under treatment for twenty-four hours. He now states that during the whole course of his hospital experience, he has seen but two instances in which either the endocardium or the pericardium became inflamed after the treatment had been continued for twenty-four hours, and in one of these the alkalies had been imprudently abandoned, under the belief that the patient was convalescent. His plan is to push the alkalies as rapidly as possible to the point of producing alkalinity of the urine, and then to continue them in doses sufficient to maintain that condition, adding quinine or the preparations of cinchona, and cautiously diminishing the quantity of alkali day by day as the tongue cleans and the other symptoms subside. He also lays particular stress upon diet, insisting upon strict abstinence from solid food until the tongue is quite clean, and keeping the patient upon beef-tea or broth until that point is reached. He does not object to stimulants, cautiously administered, when they appear to be needed.

In view of the tendency of the local manifestations of the disease to move about from joint to joint and to the structures of the heart and other organs, it has always seemed to the writer, to be an important matter to, at least, do nothing that would be likely to increase this tendency. Without admitting the idea of actual metastasis, the question is, whether active interference, by means of topical applications, with the inflammation localized in the joints, may not disperse it only to reappear in other localities, including the heart, which otherwise might not have been affected. While it is true that these inflammatory symptoms may change places under any circumstances, yet it is not unreasonable to suppose that if their course in one location be cut short by topical means, while the condition of the blood is such that they must inevitably reappear elsewhere, there is more danger of this migration to the heart than there would be if no such abortive means were used.

Carrying this idea into practice, I have now treated eighty-seven cases of acute rheumatism, absolutely without local applications to the inflamed joints of any kind whatever; and no implication of either the endocardium or pericardium, nor any other complication has occurred in a single instance. The general treatment has been essentially the alkaline, relief from pain being secured by the free use of opiates. The arthritic inflammation has never been excessive, nor prolonged beyond the average time of its disappearance under the usual methods of treatment. One of these cases was that of a young man who had previously suffered from acute rheumatic pericarditis, but although several of the joints were severely inflamed, the heart escaped under this method of treatment, without the slightest implication.

HOSPITAL CASES.

Operations in the City and County Hospital, by F. A. Holman, M. D., Vis-Surgeon.—Reported by W. F. McNutt, M. D., M. R. C. S. E. Etc.

CASE 1, LITHOTOMY.

W. D. aet. 40, Blacksmith, admitted into the Hospital Jan, 9th 1869, for urinary trouble, which he says commenced May 1868, while he was working at his trade. Patient was emaciated, suffering from Bronchitis, constant desire to urinate, which was accompanied by pain and straining.

On exploration of the bladder discovered stone, which Dr. Holman and myself supposed to be small, and probably enveloped in a fold of mucous membrane or possibly encysted.

The patient was placed under constitutional treatment, and improved to the extent that in February it was thought advisable to subject him to lithotripsy; though the case was not considered a favorable one for the operation on account of the irritation of the parts and perhaps the stone entangled in the mucous membrane, it could do but little harm to try the less formidable operation, as the stone was evidently small. The patient evinced such sensitiveness to the instrument that it was thought better not to manipulate for any length of time even under chloroform. The effort to remove the stone by lithotripsy being abandoned, constitutional treatment was resumed, and continued until April 3d. His condition improved but slowly. Chloroform being administered, the lateral operation was performed. The stone was fixed in a fold of mucous membrane but was dislodged without much difficulty. It broke into fragments by the pressure of the forceps; the pieces being removed by the scoop and douche. A female catheter was passed into the bladder through the wound and allowed to remain. The concretion was phosphatic throughout.

May 1st, notwithstanding the irritable and unfavorable condition of the patient, the case is doing well, urine nearly all passes through the urethra, wound almost closed.

Remarks.—Perhaps forty years ago this case would have been considered an excellent one for the operation, a circumstance which should give the modern a great advantage over the earlier surgeons, and should be taken into consideration in comparing the different methods of operating, and the results of the different operators. The Rev. John Bullen says in his report of his own case, that when he consulted Sir Astley Cooper, in May 1818, Sir Astley said "that as I had not been sufficiently reduced by the irritation of the disease to render me a favorable subject for the operation, it would be better for me to return to Cambridge, and by pursuing a certain plan of diet and regimen to reduce the high health which I appeared to possess." "With this advice I returned home where I remained till October, etc. etc."

The question suggested itself to me whether calculi enveloped in the mucous membrane or encysted are not of vesical, phosphatic origin, rather than of renal; but from examination of the reported cases to which I have access, am not able to find that the question had attracted the attention of the reporters.

CASE 2. CIRCUMCISION.

Thos M. aet. 29, strong, healthy looking man, contracted chancres, Oct. 1868. November 15th entered hospital, with a crop of chancres around the base of the glans, accompanied with a very inflamed condition of the penis. Notwithstanding careful treatment, varied at times according to circumstances, the case resulted in permanent acquired phimosis, with solid œdema of the prepuce. The elongated prepuce was drawn forwards, seized tightly with narrow polypus forceps, and the integuments projecting beyond the forceps removed by one cut of the bistoury. The forceps being removed, the mucous membrane was then slit up, its angles trimmed, and the membrane turned back was attached to the edges of the cutaneous incision by silver sutures.

CASE 3. CIRCUMCISION.

April 29th, Pat. B. aet. 20, congenital phimosis, penis small, undeveloped. The operation was performed as in the preceding case.

CASE 4. EXCISION OF SUPERIOR MAXILLARY AND POLYPUS OF ANTRUM.

April 26th, 1869. W. J. aet. 36. admitted into the hospital June 1868, ten months ago. He says he then had swelling of right cheek which extended to the side of the nose, preventing him from breathing through the right nostril. That the swelling gradually increased, until, it also caused stillicidium lacrymarum by November, in which month Dr. Toland operated at his clinic for nasal polypus, after the removal of which he says for a few weeks he could force a little air through the right nostril. He says the swelling kept gradually increasing as also did the feeling of distension, until two months ago, since which time he thinks the tumor has not increased in size, but there has been a discharge of pus from the nose, and also into the mouth. Saw the patient yesterday for the first time with Dr. Holman. The tumor of the cheek was rather of an oval form, projecting outward and downwards, pressing the floor of the orbit up slightly, the malar up and out slightly, pressing the palate down, making considerable swelling in the roof of the mouth; the alveolar was pushed out and downwards making the outline of the teeth irregular. There was a small ulcer below the lachrymal sac, into which the probe could be passed down through the antrum into the mouth, showing absorption of the anterior wall of the antrum, and of the palate bone. There being no enlarged glands, no appearance of the tissues being implicated, or of sprouting masses projecting from the tumor, and the countenance being free from that characteristic expression of malignant disease, the case was considered non-malignant, and operation the treatment.

OPERATION.

An incision commencing on level and internal to the infra-orbital foramen and extending down the side of the nose, close to the root of the ala, being then carried outwards and downwards to the outer corner of the mouth. The cheek then dissected off, an incisor tooth extracted, the alveolio separated with the cutting forceps. The portion of the right palate not absorbed by the pressure of the tumor was dissected carefully from the soft tissue and removed with the cutting forceps; the maxillary separated from the malar and removed along with the tumor, which was about the size of a turkey's egg. The malar, floor of the orbit, and nasal bones not removed. The wound was brought together with silver sutures and dressed.

Remarks.—The nature of the tumor is as Professor Gross says, one of the "great varieties of morbid growths described under the name of polypus, much to the detriment of sound pathology and practice." The incision is one that I have

employed before, but which I have never seen described. It is accompanied with less bleeding than any of the formidable cuts described and leaves a cicatrix scarcely noticeable. The cut from the ala to the outer angle of the mouth follows the natural seam, which in most cases is well marked.

May 22d, very little disfiguration; roof of the mouth preserved. The soft tissue of the palate adhered to the mucous membrane of the cheek, except a small opening, from which there is slight discharge from the cavity.

CORRESPONDENCE.

Philadelphia, May 6, 1869.

Mr. Editor:

Medical teaching still clams a large place with the profession here, and its honors are eagerly sought. Recently on the resignation of Prof. Robley Dunglison, as Professor of Institutes of Medicine at the Jefferson Medical College, after a long and very animated canvass, Dr. J. Aitken Meigs was elected to the vacant chair, and he has just finished his first admirable course of lectures. Prof. M. is widely known, both by his labors as a craniologist, especially in connection with the Morton collection, in the Academy of Natural Sciences, and also as formerly Professor of Physiology in the Pennsylvania Medical College. His accurate knowledge and delightful style as a lecturer, adds great strength to the faculty, deprived of the long and valuable services of his distinguished predecessor.

Scarcely had he finished his first course, when Dr. Dunglison, whose name is so familiar to all your readers, passed away to meet his reward. A sufferer for many years from cardiac disease, he succumbed to its painful symptoms on the 2d of April. His loss is not only local; the whole profession will miss his clear head and busy pen. His valuable library, it is understood will be sold, and there have been few collections more valuable, disposed of in this country for very many years.

The classes at the two colleges, keep at about the same figure every year since the southern hegira, just before the war. The graduating class of the Jefferson, numbered 126, and that of the University 130.

The Philadelphia school of anatomy, numbered 113 students in the winter class. All three of these institutions have established summer courses of which I give you the lists:

JEFFERSON MEDICAL COLLEGE.

Clinical Surgery,	*Professor Gross.*
Clinical Obstetrics,	*Professor Wallace.*
Medical Jurisprudence and Toxicology,	*Professor Rand.*
Materia Medica and Therapeutics,	*Professor Biddle.*
Clinical Medicine,	*Dr. J. M. Da Costa.*
Viceral and Surgical Anatomy,	*Dr. W. H. Pancoast.*
Operative and Minor Surgery,	*Dr. J. H. Brinton.*
Ophthalmic and Aural Surg'y.	*Dr. J. R. Levis.*
Venereal and Cutaneous Dis'es,	*Dr. F. F. Maury.*
Pathological Anatomy,	*Dr. W. W. Keen.*
Surgical Diseases of the Genito Urinary Organs,	*Dr. S. W. Gross.*

UNIVERSITY OF PENNSYLVANIA.

Zoology and Comp. Anat.	*Prof. H. Allen.*
Botany,	*Prof. H. C. Wood.*
Mineralogy and Geology,	*Prof. F. V. Hayden.*
Hygiene,	*Prof. H. Hartshorne.*
Med. Juris. and Toxicology,	*Prof. J. J. Reese.*

They have also established a course preliminary to the Winter Lectures, beginning in September, as follows:

Microscopy,	*Dr. James Tyson.*
Regional Anatomy,	*Dr. D. H. Agnew.*
Physical Diagnosis,	*Dr. Edw. Rhoads.*
Cutaneous Diseases,	*Dr. H. L. Hodge.*
Pathological Anatomy,	*Dr. Wm. Pepper.*

PHILADELPHIA SCHOOL OF ANATOMY.

Anatomy and Operative Surgery,	*Dr. Keen.*
Bandaging and Fracture Dressing,	*Dr. J. E. Mears.*

The general introductory at the Jefferson, was delivered by Dr. Keen, and that at the University by Dr. Hayden, in April.

Besides these public facilities, private teaching opens wide the doors for improvement, there being five courses on practical obstetrics, four on the eye, three on physical diagnosis, two on urinary analysis, two on operative surgery and bandaging, and one each, on pathological anatomy, microscopy, laryngoscopy, and practical pharmacy.

In my next I will give you some account of the Hospitals and the facilities for public and private instruction there.

Yours truly,

W.

California Medical Gazette.

SAN FRANCISCO, JUNE, 1868.

☞ *All Letters and Communications to be addressed to the "Editor California Medical Gazette, care of A. Roman & Co., San Francisco."*

THE PRESS AND QUACKERY.

Andire, atque togam jubeo componere, quisquis
Ambitione mala, aut argenti pallet amore.

Horace.

We apologize to our readers for some verbal and typographical errors, which appeared in our last number. After the copy had been sent to the printer, we both left town for our holiday, and the proofs were not corrected as they ought to have been.

We felt a blush when we saw these errors in print, but probably should have passed it over in silence, if we had not been pounced down upon by the *Daily Times*, of this city, with a rudeness and vulgarity that, happily, one but rarely sees in the press of the present day, "Is" occurs instead of "are," and instead of Glisson's capsule, the printer puts it thus: *glessons.* For this, the editor is accused of being deficient in the "rudiments of an English education," of being "captious," "arrogant," "controversial," etc., etc.

We can only explain the abusive article thus:—We denounced a portion of the daily press of this city as being the chief aiders and abettors of quackery and imposture, because they admitted the specious and mendacious advertisements of charlatans into their pages. We commended some of the papers that had written against this practice. We praised, we admit feebly (they deserved no more), some articles that appeared in the *Times*, and hence, we suppose, we hurt its vanity and self-love—"hinc illæ lachrymæ."

What, in addition, we *did* say, was this: "That the *Times*, owing to its small circulation, was not a paper likely to be selected by these advertising harpies."

What we *did not* say was this: that the *Times*, from its own published admission, would receive them. Inasmuch as it made a bid for them with some sophistry. March 16th, it says:

"The publisher of a newspaper is not called upon to decide as to the merits of any particular treatment, and so long as the advertisements sent in for publication, contain nothing hurtful to public morality, or gross in themselves, he can have no justification in excluding them."

The passive goodness and mild simplicity of the above would be charming, provided people generally were made of the same soft material as the writer.

"Hurtful to public morality!" Does the cunning scoundrel who artfully frames his specious advertisement to catch the young, approach them in "gross language?" Do the impostors who daily advertise their lying pretensions do so in other than virtuous words? Those who advertise pills *not* to be taken by women, whose menses are suppressed, are not half so dangerous as the villain who in soft and velvety words, works upon the fear and imagination of his victim, who asks to examine his urine, tells him that it is full of spermatozoa, that his blood is full of them in a decayed condition, that his life is dribbling away, that he might fall dead in the street at any moment; but, that deplorable as the case is, he has a certain remedy, he confesses expensive, but what value has money in the opposite balance to death. The scared and deluded pigeon yields, is mulcted from five hundred to fifteen hundred dollars in money, and utterly demoralized in mind. The wretch who does this, advertises largely, and according to the *Times*, his publisher cannot refuse his advertisement because his language is not gross, and he says nothing hurtful to public morality.

We have learned too much of the mental and bodily suffering produced by these advertising quacks, not to feel warmly on the subject. We do not care a straw for any petty rejoinder the *Times* may add, or for any ill-tempered, effeminate attack it may make upon us. It avoided before the real issue, and substituted personal abuse. For all we care, it may do so again. But we implore the public press not to lend its aid and assistance to these most miserable of impostors, by inserting their advertisements, but on the contrary to warn the weak and unwary, and thus save them from ruin in health and in pocket.

Before we finish, we desire to advert to a statement of the *Times*, in which it says that we *attack* Drs. Morse and Gibbons. This we emphatically deny, if, by the word attack any unkind or angry feeling is understood. We controverted a professional opinion in a professional way, as we should do that of our closest friend, if we differed in opinion with him, and we are sure that with the two gentlemen above mentioned *we* have no other than a respectful and kindly feeling.

SMALL POX AT MELBOURNE.

We have received the February number of the *Australian Medical Journal*, published at Melbourne. From it we learn that two months previously a ship, the *Avon Vale*, arrived in that port, having a case of variola on board. The patient was removed to the Immigration Hospital, and subsequently other cases of eruptive fever occurred in Melbourne, twenty-five at the time of writing, four of which were fatal.

The professional interest in the epidemic arises out of the controversy of the physicians in that city as to the true nature of the disease. They seemed to be pretty equally divided in opinion, one party maintaining that the disease was variola, the other varicella.

There was considerable alarm in the city, to appease which the Chief Secretary appointed a commission of eight medical men to inquire into and report upon the nature of the disease. The result was a perfect non-agreement. Four considered the disease true variola, and four came to the conclusion that it was varicella.

At a meeting of the Medical Society of Victoria, Dr. D. J. Thomas read a paper on "Variola and Varicella," and in the discussion which followed, all the prominent physicians of Melbourne appear to have taken part.

Dr. Thomas leaned to the opinion that the epidemic was one of varicella, and not variola, and quoted largely from Erasmus Wilson to prove the similarity in nature, and the convertibility of the two diseases. In the subsequent discussion again opinion seems to have been pretty equally divided. The editor of the

Journal, in a very lucid leader throws considerable light on the subject, by quoting the opinion of Dr. N. Chapman, in his published lectures on Eruptive Fevers, where he speaks of an epidemic—when "the eruption for the most part resembled the chicken pox in its several varieties, though in some instances it had the appearance either of the discrete or the confluent small pox." In an epidemic which occurred at Lancaster, he says: "The disease attacked indiscriminately the variolated, the vaccinated and the unprotected, though not in equal proportions. Of the first description, or those who had previously had small pox, there were six cases, of whom none died; of the second, or vaccinated, forty, two of whom, very young children, died in convulsions; and of the third, or unprotected, three hundred and fifty, among whom there were four deaths. This slender mortality, with some other facts, led me to suspect the disease was varicella. It may be remarked, in confirmation of this suspicion, that chicken pox seems everywhere to have preceded or accompanied the more fatal epidemic."

Dr. Chapman also speaks of an epidemic at Baltimore, where the mortality among the unprotected was one in six, and every degree was presented from the mildest varicella to the most malignant small pox.

With faith never to be shaken in the effective protection of vaccination, we bring these facts forward to explain many of the phenomena which were observed here during *our* late epidemic. Of course we cannot venture to give an opinion on the nature of the Melbourne epidemic, but the fact of the first case having been one of true variola—on which all were agreed—we should think that presumptive arguing would lead to the supposition that the others were of a similar nature.

The subjoined aesthetic remarks are from the *Evening Bulletin*, of May 25th. We most heartily wish a sanitarium for consumptives could be established in some suitable mountain location. For years, in common with many of our medical brethren, we have been sending our phthisical patients, such of them as could afford it, to spend, in tents, the greater part of the year in the mountains of our State, hunting and fishing; and the result has always been most satisfactory. Anathematizing coddling and pectorals, we send them to enjoy mountain air, such exercise as they can endure, such pleasure and amusement as they can find, and the appetite they are sure to gain. Our favorite localities have been the Yosemite Valley and Tahoe and its neighborhood. The suggestion of the interior valleys must be received with a caution, as most of them are too hot and enervating. A recent visit to Santa Barbara impressed us very favorably with that locality. The climate appears very equable, mild and genial, the sun's heat being tempered with a soft land breeze. It has the advantage of sea and thermal sulphurous bathing; but there are no accommodations for the invalid.

A sanitarium or a place where the poor consumptives could be provided with the necessaries of life, in any of the many desirable localities that this State possesses, is a necessity of benevolence, and one in which the current of charity could not run in a more desirable direction:

A HOME FOR CONSUMPTIVES.

A benevolent citizen, connected with one of our city charities, suggests that one of the urgent wants of this State is a home for invalids afflicted with pulmonary complaints. We have the best and the worst climates in the world for consumptives. A large number come to this coast to seek relief; most of whom would be benefitted if they had the advantages of all needful facilities. The rough winds of the city are fatal to many of this class who seek a residence here. The mountains and the interior valleys are the places for them. Then there are many persons who, because they have lost their health, must receive some charitable assistance. Sending such persons to the County Hospital, or keeping them quarantined in the city, only helps the work of decimation. A large percentage of pulmonary complaints can be helped or cured, if treated in season. There ought to be some place where such persons could be sent with another chance, at least, for life. If an institution—a sanitarium—were established in the best place in the State, we believe a large number of invalids would flock to it. It might be a private enterprise, closing its doors to none, rich or poor, who sought its advantages. Invalids who are only poor because they have lost health, should have their expenses paid by the counties, where, if not cured, they would become a public charge. The well to do could pay their own way.

Watering places do not help this class of invalids. The climate of nearly all the coast counties is unfavorable There are warm, dry valleys and sunny mountain slopes where the very perfection of climate is found. The foothills of the Sierra, the valleys of San Bernardino, the valley of the upper Sacramento—all afford good retreats for the consumptive. Only it is not certain that as an invalid, he could find a place to lay his head. In summer time, the country about Tahoe and Donner Lakes is the resort of many persons out of health. There is another class of invalids, who, having sound lungs, come from the interior to the sea-coast, and derive great benefit from the change. There is an excellent tonic in a salt atmosphere for all who are debilitated by heat and the miasma of febrile districts.

A good work could be done by some one in establishing an Invalid's Home, having regard especially for such as are suffering from pulmonary complaints. A pure, dry atmosphere, attractive scenery and careful supervision are the most important requisites. There are a hundred places in the State where all that is desirable in climate and scenery could be found. If only hospitable doors could open to these invalids, they would seek such a friendly refuge in great

numbers. With a climate in many places making it almost a paradise for consumptives, it is a wonder that up to this time no special provision has been made for them; and it is a fact not pleasant to contemplate that, either from immigration or a combination of causes, pulmonary cases are on the increase. Many persons come here seeking relief because, theoretically, California is a good place for them. These strangers do not understand at first how great a variety of climates there are, and that, while some are the very best, others could hardly be worse. Minnesota has become famous for its sanitary advantages for consumptives. And yet these are surpassed by the real advantages of California, when a just discrimination is made. If we invite invalids to seek our State, that they may get a longer lease of life, a thoughtful philanthropy might go a step further and show them some places where they can find refuge at a moderate cost.

DRY-EARTH—TREATMENT OF WOUNDS.

The dry-earth plan of treating wounds has been on trial to some extent in Philadelphia. Dr. Addinel Hewson of Philadelphia says:

"Eighteen months ago, I had under my care a most severe and complicated case of compound fracture of the leg, extending into the ankle-joint. There were circumstances connected with the case which prevented the employment of splints, and the limb was kept at rest by means of sand-bags. The suppuration was most profuse, and the odor peculiarly offensive, in spite of the repeated application of Condy's fluid. One evening not having at hand any sand to replace that which had become too offensive to remain, I filled the bags with earth taken from the garden, having first slightly dried it, intending to replace it with sand the next day. On my visit next morning, I was struck with the absence of odor from the wound; and, during the remainder of the suppurative stage of the case, employed earth in the place of sand, changing the earth every three or four days, and with the best possible result."

This led him to make subsequent experiments with the dry-earth with equally satisfactory results. The plan is a simple one and worthy of trial; if any of our readers will try it we hope that they will send us the result of their experiments.

Dr. Hewson says, that a discharged soldier had seen a man at St. Helena buried up to the neck in soil, and kept there some twenty minutes, and thus completely cured of "scurvy" of old standing, which had resisted all other treatment. Burying patients in the soil for scurvy is a plan of treatment well known to sailors, every old whaler is familiar with it from experience. Dr. Stillman of this city says, that in 1849 when there were no vegetables to be had here, he saw scurvy patients buried in what was then known as "Happy Valley," now the centre of our city.

At the present time we resort to that method, not only for "scurvy," but frequently cure our chronic cases without regard to the origin of the disease, by burying them in the soil of "Lone Mountain."

LONDON.

A paragraph is going the rounds of the papers on the magnitude of London, in which it is stated "that its population consumes annually 43,200,000 gallons of beer, 2,000,000 gallons of spirits, and 65,000 pipes of wine. As a consequence, 2,400 doctors find constant employment. London finally supports 852 churches, which are presided over by 930 divines of greater or less note." We propose to make a slight transposition, and pass it on: "London supports 852 churches, which are presided over by 930 divines of greater or less note, as a consequence its population consumes annually 43,200,000 gallons of beer, 2,000,000 gallons of spirits, and 65,000 pipes of wine," etc.

GYNÆCOLOGICAL SOCIETY OF BOSTON.

We have before us the Constitution and By-laws of this organization, whose object is the study and advancement of the science whose name it bears. The founders intend establishing a library of works bearing upon their own specialty. Its officers are: Winslow Lewis, President; Horatio R. Storer, Secretary; George H. Bixley, Treasurer. We hope that the Gynæcological Society of Boston will result in the success that the names of its founders promise.

PHILADELPHIA SCHOOL OF ANATOMY.

We have before us a prospectus of the summer session of the Philadelphia School of Anatomy. The summer course of lectures commences in April, and continues till October. The lectures on anatomy and a course on descriptive and surgical anatomy are delivered by W. W. Keen, M.D.

Being anxious to give as full a report as possible of the American Medical Association, we have crowded out considerable original and other matter, which we will endeavor to give next month.

We may say that we have examined Dr. Stout's apparatus, and certainly think that it is all that Dr. Stout claims for it, viz: strong, and at the same time light, easily applied and efficient.

BIBLIOGRAPHICAL NOTICES.

A Practical Treatise on the Diseases of Women. By T. Gaillord Thomas, M.D, &c., &c., of New York; second edition. Philadelphia, Henry C. Lea; San Francisco, A. Roman & Co.

Of all the army of books that have appeared of late years, on the diseases of the uterus and its appendages, we know of none that is so clear, comprehensive and practical as this of Dr. Thomas', or one that we should more emphatically recommend to the young practitioner, as his guide We do not pretend, in this notice, any review of the book. We therefore simply recommend as most eminently worthy of

perusal, the chapters on "Chronic Cervical Endometritis," on "Chronic Corporeal Endometritis," on "Ulceration of the Os and Cervix," and on "Versions of the Uterus."

The great value of the book is its eminently practical character, and its sound pathology.

A Treatise of the Diseases of Infancy and Childhood. By J. Lewis Smith, M.D. Philadelphia, Henry C. Lea; San Francisco, A. Roman & Co.

Still another book on the diseases of children! Dr. Smith is physician to the Infants' Hospital, Ward's Island, and, to follow the fashion of the day, he must write his book. On looking over its pages we do not find that he has anything new to tell us. Still the work is fair, shows some amount of modern reading, and on the whole, perhaps may be considered a representative book of common everyday practice, and consequently a safe guide for the inexperienced practitioner.

A Conspectus of the Medical Sciences; comprising Manuals on Anatomy, Physiology, Chemistry, Materia Medica, Practice of Medicine, Surgery and Obstetrics. For the use of students. By Henry Hartshorne, A.M., M.D. Philadelphia, Henry C. Lea; San Francisco, A. Roman & Co.

We think Dr. Hartshorne has done good service to the medical student by publishing the series of manuels above indicated in one volume. We feel sure that it will come into very general, if not universal, use, not only on account of its intrinsic merit, but from its convenient size. Of course the information given is very condensed, but we do not think too much so for the student to read up and commit to memory after lecture. The volume too is copiously illustrated by well executed wood-cuts.

How to Read Character. A new illustrated hand-book of Phrenology and Physiognomy. New York, Samuel R. Wells; San Francisco, A. Roman & Co.

This is a little book on Phrenology, with very pretty pictures. It will not make many converts to the ology, but it will be a pet with those young misses who love the science.

Syphilis and Local Contagious Disorders. By Berkeley Hill, M.B. Lond., F.R.C.S. Philadelphia, Henry C. Lea; San Francisco, A. Roman & Co.

We are very glad to welcome from the house of Mr. Lea this reprint of Berkeley Hill's very valuable work on Syphilis. Bringing, as it does, the entire literature of the disease down to the present day, and giving with great ability the results of modern research, it is in every respect a most desirable work, and one which should find a place in the library of every surgeon.

Essentials of the Principles and Practice of Medicine. By Henry Hartshorne, M.D. Philadelphia, Henry C. Lea, San Francisco, A. Roman & Co.

This is a second edition of one of the very best hand-books of medicine that this country has produced. The history of a disease is given in clear, concise and terse language, and the treatment is to the point and practical. It is precisely the book we would recommend for the office table of every practitioner.

A Treatise on Physiology and Hygiene. For schools, families and colleges. By J. C. Dalton, M.D. New York, Harper & Brothers; San Francisco, A. Roman & Co.

Of all the works we have met with on popular physiology, this certainly is the best. Dr. Dalton has accomplished what he intended, and has produced a book on physiology, well written and in simple, everyday talking words, which common every day talking people can understand.

Physicians should do their best to recommend such a book as this. They would find their work made much more pleasant and easy, if their patients understood the simple principles of physiology. It is infinitely more agreeable to treat an intelligent and instructed patient, than one whose head is a block, or filled with ignorant notions and superstitions.

The Use of the Laryngoscope in Diseases of the Throat; with an Essay on Hoarseness, Loss of Voice, Stridulous Breathing, &c. By Morell Mackenzie, M.D., London. Second edition, with additions, by J. Solis Cohen, M.D. Philadelphia, Lindsay & Blakiston; San Francisco, A. Roman & Co.

To those who have not yet made themselves acquainted. and availed themselves of the benefits to be derived from the use of the laryngoscope, we heartily recommend Dr. Mackenzie's book. It is a complete treatise, opening with a history of the instrument. He goes on with a full description of it—gives in a lucid manner, instructions how to use it, and what is seen in the healthy larynx. We then have a chapter on the application of remedies to the larynx, when diseased, with the aid of the laryngoscope, and on various operations. There is a very valuable chapter on hoarseness, loss of voice and stridulous breathing, in relation to nervo-muscular affections of the larynx, and lastly, a chapter on the examination of the nasal passages.

The work is enriched with two lithographic plates and many illustrations on wood. It is clearly printed on good paper and well worthy of the publishing house that issues it.

REPORTS OF SOCIETIES.

AMERICAN MEDICAL ASSOCIATION.

Through the kindness of E. S. Gaillard, M.D., editor of the *Richmond and Louisville Medical Journal,* we have received the *Courier-Journal* of Louisville, which contains a complete report of the proceedings of the twentieth annual session of the American Medical Association, held in New Orleans, La., commencing May 4th, 1869. Our space will not permit us to give the full report, as compiled for the *Courier-Journal,* but will make such extracts as will be of most interest to our readers.

In general construction, the Association represents incorporated insitutions, such as Hospitals, Insane Asylums, Medical Faculties, Societies and Colleges, throughout the Union. The members are divided into two classes:

1. Delegates. 2. Permanent members.

A delegate has the right to vote and to speak. A permanent member has the right to participate in the debates, without the privilege of a vote. The fact of having been a delegate gives one a title to permanent membership.

The officers are nominated by a committee of nominations, composed of a representative from each State, one from the medical staff of the army and navy, appointed in the first instance by the Surgeon-General, and in the second by the Chief of the Naval Medical Bureau at Washington.

The Society publishes annually a large volume of transactions, embracing not only the official proceedings, but reports from special committees, appointed to report upon the progress made in every department of medicine, especially in cases of epidemics prevailing during the past year.

The session of this year has drawn the largest number of Southern delegates since the close of the war. It may, in fact, be called the first regular meeting since 1861—the session held last year at Washington City not having attracted a numerous delegation from south of the Potomac.

The attendance at the annual meeting of this year, so imposing both in numbers and the reputation of its participants, is a happy augury for the interests of the profession in the United States. In a country marked by so many climatic differences, such interchanges of professional opinions, cannot but be useful in imparting precision to the multiplied questions belonging to medical science.

LIST OF OFFICERS OF THE ASSOCIATION.

The following is a list of the officers of the Association for 1869:

President—William O. Baldwin, M.D., Montgomery, Ala.

Vice-Presidents—Gerge Mendenhall, M.D., Cincinnati, O.; Noble Young, M.D., Washington, D.C.; N. P. Moore, M.D., Portland, Maine; S. M. Bemiss, M.D., New Orleans, La.

Permanent Secretary—William B. Atkinson, M.D., Philadelphia.

Assistant Secretary—A. J. Semmes, M.D., Savannah, Ga.

Treasurer—Caspar Wister, M.D., Philadelphia.

PROCEEDINGS OF THE OPENING DAY.

The American Medical Association met in the Mechanics' Institute at 11 A.M.

The President, Dr. W. O. Baldwin, of Alabama, occupied the chair, assisted by Vice-Presidents Dr. George Mendenhall, of Ohio, and S. M. Bemiss, of Louisiana.

The session was opened with prayer by Rev. Mr. Gallaher, of New Orleans.

Dr. T. G. Richardson, of Louisiana, chairman of the Committee of Arrangements, welcomed the delegates to the city in an eloquent address.

The President then delivered the annual address.

On motion of Dr. Mussey, it was resolved that each State Medical Society be requested to prepare an annual register of all the regular practitioners of medicine in their respective States, giving the name of the colleges in which they may have graduated, and date of diploma or license.

Special reports of committees were then made.

The special feature of this day's proceedings was the delivery of the President's address, which was universally commended and admired.

SECOND DAY'S PROCEEDINGS.

At 9 A.M., Dr. W. O. Baldwin, the President, in the chair, called the meeting to order.

Dr. J. M. Bush, of Kentucky, offered the following resolution:

Resolved, That a committee of five members be appoinied by the Chair to take into consideration the subjects alluded to in the President's address, and report at this meeting.

The resolution having been adopted, the President selected a committee.

Dr. McPheeters, of Missouri, offered a communication from the Medical Association of that State, in reference to medical education.

Dr. Gaillard, of Kentucky, offered the following preamble and resolutions, which were referred to the same committee:

WHEREAS, The medical teachers of America have, after a trial of twenty-two years, failed to meet satisfactorily and efficiently the requirements of the great body of the profession, in regard to medical education, and

Whereas, The condition of the profession is yearly becoming more deplorable on account of the antagonistic and objectionable policy of medical schools, in making the amount of fees charged, rather than scientific teaching, the basis of competition, and

Whereas, To obtain professionally competent graduates, sound and efficient teachers are indispensably necessary, and

Whereas, Such teachers, to be found throughout the country, cannot be induced to leave their homes without the assurance of competent remuneration, and

Whereas, Such remuneration can only be obtained by adequate fees charged, unless by a system of low fees, the number of students be relied upon to make up the inevitable pecuniary deficiency, and

Whereas, Reliance upon numbers of students for this purpose deplorably crowds the already overcrowded professional field, diminishing thereby individual income, judgment, experience and skill, thereby compelling practitioners to resort to other avocations as a source of supplemental income, and

Whereas, This devotion to other pursuits destroys opportunities for study and improvement, degrading thereby the status and standing of American physicians, and

Whereas, the schools of New England, New York, Pennsylvania, Maryland, Virginia, South Carolina, Georgia, Missouri, Tennessee, Louisiana, Alabama, and District of Columbia now charge comparatively remunerative fees; and

Whereas, the *low system* of fees is charged only in a few of the Middle States, and can with advantage be made to conform with the rate of fees charged elsewhere; and

Whereas, it is as unethical for colleges to underbid each other pecuniarily as it is for practioners to do so.

Resolved. That hereafter no medical school in this country other than those fully endowed, be entitled to representation in this association, if the amount charged by such schools for a single course of regular lectures be less than one hundred and forty dollars.

Resolved, That all schools charging less than this sum are earnestly requested by this association to advance their rate of fees to the amount mentioned.

A recess was taken to allow the selection of members of the Committee on Nominations.

On reassembling, the permanent Secretary announced the following as the Committee on Nominations:

New York, J. C. Smith; Delaware, H. F. Askew; Pennsylvania, A. M. Pollack; Kentucky, H. M. Skillman; Tennessee, J. B. Lindsley; Mississippi, W. Y. Gadbury; Alabama, J. Cochran; Ohio, Jno. Townsend; Indiana, B. S. Woodworth; Illinois, T. D. Fitch; Wisconsin, H. Van Dusen; Missouri, J. S. Moore; Michigan, J. B. White; Georgia, R. D. Arnold; Louisiana, S. Logan; Texas, S. M. Welch; Minnesota, C. N. Hewitt; Arkansas, R. G. Jennings; West Virginia, W. J. Bates; Rhode Island, G. L. Collins; District of Columbia, L. W. Ritchie; United States Army, J. J. Woodward; United States Navy, F. E. Potter.

Dr. Chaille, of Louisiana, submitted a proposition for a common medical nomenclature in the United States, taking as a model an official publication on the subject by the Royal College of Physicians of London, and offered the following resolutions, which were adopted:

Resolved, That a committee of five be appointed by the President to report as soon as practicable to the present session of this association upon the following:

1. The propriety of adopting and using its influence to have adopted by the entire medical profession in the United States, the provincial "Nomenclature of Diseases of the Royal College of Physicians."

2. On the practicability of having this nomenclature published in such manner as may render it easily and cheaply accessible to every member of the profession.

3. To recommend such other practical measures for the action of this association as may be necessary to introduce this nomenclature into official (military, naval, etc.) and general use.

On motion, the Committee on Nominations were permitted to retire for consultation.

The special order for 12 being the report on Specialists, it was read by the Secretary, and, on motion of Dr. Sayre, the resolutions were adopted and the report referred to the Committee on Publication.

Dr. L. P. Yandell, Jr., of Kentucky, introduced the following resolution:

Resolved, That private handbills addressed to the members of the medical profession, or advertisements in the newspapers, calling the attention of professional brethren to themselves as specialists be declared in violation of article—of section—of the code of Ethics of American Medical Association.

Dr. S. N. Davis, of Illinois, said it had been the practice to publish cards in medical journals for the purpose of informing the medical fraternity that the advertiser devotes himself to special diseases. These cards were not so much for the information of the public, as for the medical fraternity. He hoped that, now the questisn was up, it would be discussed fully.

Dr. L. P. Yandell, of Kentucky: We have allowed physicians to violate the code of ethics by advertising in medical journals that they are specialists in the treatment of certain diseases. In Europe they are stricter in regard to specialists than here. There, where a physician wins a reputation in the treatment of certain diseases, his professional brethren

send cases to him for treatm nt, but advertisement is prohibited. If we are allowed to resort to advertisements not as a question of merit, but of money, this association should so declare. I am sure I am right in principle and I want to get an expression from this association.

Dr. Sayre, of New York—Let those who understand the the best mode of treatment in special diseases instruct their professional brethren through the proper channels, as the honorable way of preferment, not by advertising as a matter of dollars and cents. Let us look the matter square in the face and sustain the resolution of Dr. Yandell. May my hand be paralyzed if I make any attempt to profit by advertising the knowledge I have attained in my profession.

Dr. Mussey, of Ohio, moved to amend by inserting "or in medical journals."

This amendment was accepted.

Mr. Davis, of Illinois—The question before us is one to settle the interpretation of the existing statute. The question is whether that rule of ethics shall be enforced prohibiting publication of cards calling the attention of individuals laboring under particular diseases.

Dr. Yandell stated that he had preferred charges against a practitioner of Louisville, for advertising himself as a specialist in the newspapers, and for sending handbills to physicians, but that the medical societies of that city not having sustained him, he brought this subject up for the action of this Association. The question is, shall we associate with professional prostitutes and medical outlaws.

Dr. Yandall's resolution was unanimously adopted.

The committee on prize essays reported as follows, their report being adopted:

They have received but two essays; one upon the "Physiological effects and Therapeutical uses of Atropia and its salts," the other upon "Quinine as a Therapeutic agent." They agreed to present both of these essays to the Association, and to recommend a prize of one hundred dollars to each of them.

S. M. BEMISS, Chairman,
C. BEARD,
JOSEPH T. SCOTT,
S. A. SMITH.

The Secretary broke the seals and announced that Dr. S. S. Herrick, of New Orleans, was the author of the paper on quinine, and Dr. Roberts Bartholomew, of Cincinnati, was the author of that on atropia.

Dr. Booth, of Mississippi, offered the following preamble and resolution:

Resolved, That the proper construction of Art. 4, Sec. 1, Code of Ethics, A.M.A., having been called for, relative to consultation with irregular practitioners who are graduates of regular schools,

Resolved, That said Art. 4, Sec. 1, Code of Ethics, A.M.A., excludes all such practitioners from recognition by the regular profession.

This resolution was unanimously adopted.

On motion the Association adjourned till Thursday, at 10 A.M.

THIRD DAY, THURSDAY, MAY 6, 1869.

Dr. Baldwin. President, in the chair. Dr. S. N. Bemiss and Dr. Mendenhall, Vice-Presidents.

Reading of the minutes was dispensed with.

On Dr. Parvin's report of Committee on President's address, your committee desire to present the following report:

We cannot refrain, before entering upon the consideration of the plan recommended by the President for the improvement of medical education, gladly expressing our high appreciation of the general tone of this address, of the broad and catholic spirit which pervades it, finding expression in earnest and eloquent words—in brief, we believe the address worthy the perusal of every member of the profession, in that it was worthy the memorable occasion, and is worthy the annals of medicine.

On the other hand, we cannot refrain, with sadness be it said, from acknowledging the truth of the terrible allegations made against the present condition of medical education, and the little success attending the efforts for improvement in such connection, made during a score of years.

The special recommendation made by the President is in these words:

"I would advise that we appoint a committee of our wisest and best men, to digest a plan for one or more National Medical Schools, and to memorialize Congress in behalf of the enterprise. Let the plan embrace as a basis, the features presented by the Cincinnati Convention of Teachers. Let these schools or universities confer such distinctions and privileges as will be proportionate to the superiority they demand, and such as will make the attainment of their diploma an object of the ambition of those who engage in the study of medicine; let the choice be open to all aspirants, and the appointment or election of professors so guarded as to secure the very highest talent. the most profound learning, with the most fully demonstrated capacity for teaching. Make the salaries of the professors large, and not to depend upon the number of students; and let the Federal Government assume a proper share of the expenses incurred."

Your committee express their hearty approval of this general plan, but suggest that the effort at first should be for the establishment of but a single school, as more feasible, and besides, one such institution would be a model which other medical colleges might, in time, be induced to imitate in extent, duration and thoroughness of teaching, in rigidness of requirements for the degree of M.D.

We likewise desire to say that when the details of this general plan are thrown into form, there should be the amplest security against the places and the power of such a medical college, as designed, ever falling into the hands of politicians or the protegés of politicians. Medicine is higher than politics; broader than political creeds and party platforms.

In conclusion, your committee reiterate the recommendation of the President as to the appointment of a committtee for the special purposes referred to

The President appointed this committee as follows: Dr. N. S. Davis, of Chicago; Dr. F. Gurney Smith, of Philadelphia; Dr. D. H. Stoter, of Boston; Dr. E. Gaillard, of Louisville; Dr. Joseph Jones, of New Orleans.

On motion, Dr. W. O. Baldwin, of Montgomery, was added to the committee.

The President appointed as delegates to the British Medical Association: Dr. N. Pinckney, U. S. N.; R. R. McIlvain, Ohio; J. F. Hibbard, Indiana; B. Lindsey, D. C.; G. C. Blackman, Ohio.

To the Canadian Association: Dr. Alden Marsh, Albany, New York.

Dr. Davis read report of meeting of editors, and presented the following from the Association of American Medical Editors:

To the American Medical Association: I have been instructed to announce to your honorable body, that those members of your Association in attendance on this annual meeting, after proper consultation, have effected a permanent organization, with the title of "The Association of American Medical Editors." The objects of this Association are the cultivation of friendly relations, mutual assistance, community of effort and views, where possible, in a system of receiving foreign exchanges, and sending our own journals abroad; concert of action in support of improvement in the present state of medical education, and of a higher standard of preliminary attainments for those who propose to enter upon the study of medicine; in proposing laws for the proper registration of births, marriages and deaths; in collecting the names of all the regular practitioners in the several States; and in promoting generally the value and efficiency of our periodical medical literature. The Association thus formed is to hold its annual sessions on the day preceding the annual meetings of this body, and in the same localities. Dr. Mitchell, of New Orleans, is the permanent Secretary, and Dr. J. B. Lindsley, of Nashville, Tenn., the Assistant Secretary. Congratulating yonr honorable body on the establishment of another organized power within the ranks of your noble profession,

I remain yours, most truly,
N. S. DAVIS, Editor,
President of Association of American Medical Editors.

Referred to Committee on Publication.

In the case of a special violation of the code in Louisville, Kentucky, Dr. Gaillard desired to remove an unfortunate and incorrect impression created in the minds of the members of the Association by one of the delegates from Louisville, (Dr. Yandell) in regard to a failure on the part of two medical societies in that city to meet promptly and fully an

alleged breach of the code of ethics on the part of one of the members of these societies.

Dr. Gaillard stated that he was satisfied Dr. Yandell had no intention of creating a false impression in this connection. The gentleman against whom charges had been preferred was a German of professional proficiency, who recently arrived, and ignorant of the code of ethics, had advertised himself as a specialist in the daily papers, and had sent private handbills to professional men. As soon as this gentleman was apprised of his fault he had promptly withdrawn his advertisement from the daily papers and had ceased sending the handbills mentioned. The medical societies of Louisville decided that though there had been a breach in the letter of the code of ethics, the gentleman arraigned had no intention of doing what was professionally wrong. These societies, therefore, declined to expel the member against whom these charges had been preferred. Dr. Gaillard thought it due to those societies and to the gentleman offending that this explanation should go upon the records.

The Committe on Nominations—Dr. J. J. Woodward, U. S. N,, President—reported the following names:

REPORT OF THE NOMINATING COMMITTEE.

NEW ORLEANS, La., May 6, 1869.

The Committee on Nominations unanimously report as follows:

For President—Geo. Mendenhall, Ohio.

For Vice-Presidents—Warren Stone, La.; Lewis A. Sayre, N. Y.; F. Gurney Smith, Penn.; John S. Moore, Mo.

For Assistant Secretary—Wm. Lee, D. C.

For Treasurer—Casper Wister, Penn.

For Librarian—Robt. Reyburn, D. C.

Committee of Arrangements—Thomas Antisell, Chairman; Robert Reyburn, C. M. Ford, L. W. Ritchie, W. J. C. Duhamel, D. R. Hayner, C. F. Nally.

Committee of Publication—F. Gurney Smith, Pa., Chairman; W. B. Atkinson, Pa.; A. J. Semmes, Ga,; Robt. Reyburn, D. C.; Casper Wister, Pa.; H. F. Askew, Del., Wm. Maybury, Pa.

Committee on Medical Literature—J. J. Woodward, U. S. A., Chairman; W. H. Anderson, Ala.; Theophilus Parvin, Ind.; Hosmer A. Johnson, Ill.; C. W. Parsons, R. I.

Committee on Prize Essays—Grafton Tyler, D. C. Chairman; N. R. Lincoln, D. C.; N. R. Smith, Md.; G. W. Miltenberger, Md.; W. R. Dunbar, Md.

Committee on Epidemics—Add the following to fill vacancies: J. K. Bartlett, Wis.; J. B. Jackson, Ky.

Committee on Education—T. G. Richardson, La., Chairman; E. W. Jenks, Mich.; E. S. Gaillard, Ky.; W. M. McPheeters, Mo.

Time for meeting, in Washington, first Tuesday in May, 1870.

J. J. WOODWARD, U. S. A. Chairman.

The report was unanimously adopted.

Mr. Davis offered the following:

Resolved, That a special committee of three be appointed by the Presideut to present copies of the resolutions adopted before the several State medical societies at as early a period as possible. Adopted.

Dr. Chaille, of Louisiana, Chairman of the Committee, presented a report on medical nomenclature, which was received and adopted, and referred to Committee on Publication.

The Committee on the Nomenclature of Diseases have the honor to report that it has examined the "Provisional Nomenclature of the Royal College of Physicians," of London, and is of the opinion that it is desirable for this Association to recommend and adopt the same for general use in this country, with such modifications as, on deliberate consideration, may appear to be necessary. The following resolutions are therefore submitted:

1. *Resolved,* That a special committee of fifteen be appointed by the President to take this subject into deliberate consideration, and to report at the next annual session what alterations, if any, are necessary to adapt the proposed nomenclature to general use in the United States.

2. That this committee be authorized to fill up any vacancies which may occur upon it.

3. That the Committee on Publication be authorized to publish for general distribution one thousand copies of the English and Latin portions of this nomenclature, under the designation of the Proposed Nomenclature, prefacing the same with such remarks as may be deemed necessary, to secure the criticism and coöperation of as large a number of American medical men as practicable.

4. That the committee hereby appointed be directed to call the attention of the Surgeon-General of the army, of the Chief of the Bureau of Medicine and Surgery of the navy, and of the Superintendent of the Census, to the question of their official adoption of the proposed nomenclature; to invite them to appoint whom they see fit to represent them on this committee; and to solicit such coöperation as may be necessary to accomplish the purpose desired, viz: the final adoption of such nomenclature and classification as will receive the conjoint approval of the official medical bureaus of the Government and of the general profession.

STANFORD E. CHAILLE, M.D., Chairman.
S. E. CHAILLE, Louisiana;
J. J. WOODWARD, United States Army.
A. B. PALMER, Michigan.
F. F. SMITH, Pennsylvania.
S. F. HEUSTIS, Alabama.

The following committee of fifteen was appointed:

Francis G. Smith, Chairman; J. J. Woodward, U. S. A.; R. F. Michel, Alabama; A. B. Palmer, Michigan; S. E. Chaille, Louisiana; L. P. Yandell, Jr., Kentucky; Austin Flint, New York; Alonzo Clark, New York; George B. Wood, Pennsylvania; S. H. Dickson, Pennsylvania; E. Jarvis, Massachusetts; Theodore Parvin, Indiana; W. M. McPheeters, Missouri; E. M. Snow, Rhode Island; N. Pinckney, U. S. N.

The Committee on Medical Education having referred matters at issue to State medical societies, Dr. E. S. Gaillard, of Louisville, offered the following motion:

Moved, That the adoption of a uniform rate of collegiate's fees, $120, being the minimum, be accepted as the sentiment and desire of this Association.

After quite a lengthy discussion the motion was adopted.

FOURTH DAY, FRIDAY, MAY 7, 1869.

The Association met at 9 o'clock, Dr. Baldwin in the chair.

Reading of the minutes omitted.

Dr. Joseph Jones, Louisiana, presented a number of specimens of pathology, anatomy and natural history. The explanations were very interesting.

On motion of Dr. Garrish, Kentucky, the thanks of the Association were tendered to Dr. Jones.

On motion of Dr. F. G. Smith, of Pennsylvania, the following resolution was unanimously adopted by a vote of the members present, standing as a mark of respect:

Resolved, That the thanks of the Association are justly due and are hereby tendered to the President, for the uniform kindness and courtesy with which he has presided over its deliberations, and to the Committee of Arrangements, the physicians, and citizens of New Orleans, for the generous hospitality and fraternal kindness with which we have been received and treated during our sojourn in their city, with the assurance that the memories of this visit will always be among the brightest and most enduring of our lives.

Resolved, That we also present our thanks to the various railroad and steamboat companies who have so liberally extended to us facilities of transportation, and to the daily press, for their efficient aid in reporting the proceedings of this meeting.

On motion of J. P. Moore, of Mississippi, the following preamble and resolution were adopted:

WHEREAS, The contract system is contrary to medical ethics,

Resolved, That all contract physicians, as well as those guilty of bidding for practice, at less rates than those established by a majority of regular graduates of the same locality, be classed as irregular practitioners.

On motion for adjournment, the President delivered this address, which was unanimously accepted, and ordered to be published in the transactions of the Association:

GENTLEMEN: Before I submit the motion last made, and which, when adopted, will practically close my official relations to this body, allow me to return you my most cordial

and grateful thanks for the universal kindness which I have received at your hands. Whatever my future lot in life may be, the world holds no honors which to me can equal those conferred by you. The fraternal good will which has so conspicuously marked your deliberations has been to me a matter of infinite satisfaction and pride, and will not be the least among the grateful memories which will gladden my heart as I may hereafter review the incidents of my official connection with you.

To win your judgment and approval, to hold up the dignity of fellowship, the usefulness of association and the interest and prosperity of the profession at large have certainly occupied my most anxious thoughts since my elevation to this position; yet to cherish and promote the intimate and cordial relations of friendship between the individual members of this Association against all sectional distinctions or geograpical lines, has also been among the chief objects of my ambition and the earnest desires of my heart. Could I now believe my efforts have contributed in the slightest degree to enlarging the harmony of sentiment and fraternal feeling which has been so apparent throughout this meeting, I should feel that I had commenced at least to make some return for the great, honorable kindness received at your hands.

It now only remains for me, gentlemen, to again express to you my thanks, to wish you a safe return to your homes and labors, a happy reunion with your friends and families, and to pronounce that sad word, over which the heart of friendship, would fain linger, as I bid you an affectionate farewell.

W. O. BALDWIN,
President A. M. A.

The Convention adjourned to meet in Washington, D. C., the second Tuesday in May, 1870.

☞ *Readers of the* California Medical Gazette *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received and acknowledged under "Communications received."*

SURGERY.

AN IMPROVISED FRACTURE BED.

By Albert Smith, M. D., Petersbourgh, N. H.

The following suggestions, which are only the application of a well known principle, seem to me to embody an important improvement in the treatment of fractures of the lower limbs, or indeed of any bed-cases. The apparatus is so cheap and easy of construction, as to be within the means of any one; and may be improvised at once, under almost any circumstances in which a patient may be placed. I herewith send you the plan proposed, and the mode of using it.

I was called in consultation with Dr. W. D. Chase, of this town, to Mr. Miles Robinson, of Bennington, who had fractured his thigh near the trochanter major, by a fall from his haymow. After the bed had been prepared and the fracture adjusted, and extension applied by a weight over a pulley, I suggested that an apparatus should be constructed for the purpose of raising him from the bed, without injury to the fracture. Those who have the means can procure appliances of this kind, such as Dr. Josiah Crosby's fracture bed, or Dr. W. D. Buck's modification, or others; but the patient was poor, and must have gone without them, unless some cheaper arrangement could have been suggested.

We adopted the following plan:—We directed a frame to be made of the length of the bed, and about three feet wide, composed of four pieces of plank, say 3x2 inches in thickness, if of soft wood, secured at the corners by a mortise or a bolt. Across this frame, from one side to the other, bands of some strong material which might be webbing or bed ticking, or any other strong cloth, about six inches wide, were carried under the body of the patient, but over the sheet on which he lay, and were fastened securely to the frame on each side, the bands being arranged about six or eight inches apart. This apparatus might remain in its place without any inconvenience, when not used. In order to raise it with the patient on it, a staple was driven into the ceiling over the centre of the bed; a small tackle was hooked upon the staple and a cord from the corner of the frame was attached to the lower block of the tackle. Assisted by the rope of this tackle the patient can now, with little effort, raise himself as often as may be necessary or desirable.

In this case, the patient had been suffering for years with a painful sciatica of the thigh that was broken, and seemed a most unpromising subject for such a grave injury. But with this apparatus, he is quite free from pain, and seems to be doing as well as any one could at his age, (66,) it being now nearly four weeks since the accident occurred. In the meanwhile, extension has been kept up without any inconvenience or pain, and there is every prospect of a useful limb, with very little shortening.

This is the second case in which I have used this apparatus with complete success. In the former case, a compound fracture of the tibia, with extensive lacerations of the soft parts, the patient had lain more than forty days on his back, with much suffering and uneasiness. The application of this apparatus surprised and delighted him with the great comfort it afforded, and the ease with which it was used. It was a complete relief to his restlessness; it quieted and soothed him, it gave an opportunity to ventilate and make up his bed as often as desired, it answered all purposes of defecation, and prevented any thing like bed-sores, so likely to occur when a patient is long confined to one position.—*Boston Medical and Surgical Journal.*

SALIVARY FISTULA SUCCESSFULLY TREATED BY OPERATION.

(Under the care of Mr. John D. Hill,) Royal Free Hospital London.

Salivary fistula is perhaps one of the most troublesome and intractable affections requiring surgical aid, and this is explained by a consideration of the physiological processes connected with the structures implicated in its course.

In some instances, however, a successful issue may be attained in a comparatively short period of time, provided the patient be constantly under the surgeon's eye.

The cause of this affection being understood, the first step in surgical treatment is to establish a free communication between the gland and the cavity of the mouth. This having been accomplished, the fistula is then to be closed.

Mr. Hill has adopted the following operation: The patient having been placed upon a sofa, a very fine silver or gold probe is carefully and gently insinuated along the whole track of the fistula, so far as it will pass. The forefinger is then introduced into the mouth, to feel for the bulb of the probe, which is generally well covered with soft parts; if this can be felt, then a curved or straight needle (threaded) is guided along the probe and then thrust through the mucous membrane into the mouth. One end of the thread is now drawn out of the mouth, while the needle is withdrawn with the other end; the probe being returned, the needle is again passed along it, and thrust through at another point,

one-third of an inch from the first, and, if possible, nearer the gland. The probe is now withdrawn, and the ends of the thread, which are both in the mouth, are tied together, forming a small seton. Mr. Hill has sometimes had occasion to adopt certain modifications in the steps of this operation, as in Case No. 1, where the fistulous channel was extremely long and oblique; here he passed the needle through the entire thickness of the cheek, exactly opposite the bulb of the probe; and again, in Case No. 2, where the fistula was extremely tortuous, he succeeded in passing the thread from within, taking the bulb of the probe as his guide.

The seton is retained for a variable time, but as soon as all irritation consequent on the first stage of the operation has subsided, the edges of the fistula are pared with a fine needle-pointed knife, then carefully drawn into direct apposition, and, lastly, keep covered with collodion for three days. The proceeding may have to be repeated several times, at intervals; but if great care has been taken, and no severe inflammation has ensued, at the end of a fortnight or less, the fistulous aperture will be found, if not quite closed, much reduced in size, and may in the latter case, be touched with a fine cautery, to complete the cure.—*Medical Times and Gazette.*

LIGATURE OF GREAT VESSELS IN DUBLIN.

The profession in Dublin has been much interested in the progress and result of two capital operations lately performed in Dublin by Mr. Tuffnell, surgeon to the City of Dublin Hospital, and Mr. W. Stokes, Surgeon to the Richmond Hospital. Mr. Tuffnell's case was one of ligature of the iliac for aneurism of the common femoral. The limb had attained a circumference of over two feet before the operation. The patient survived for nearly three weeks, but, we regret to learn, died a few days since of pyæmia. On *post-mortem* examination it was ascertained that not the least effort of nature had been made towards occlusion of the artery.

Mr. Stokes' operation was one of ligature of the abdominal aorta close to the bifurcation. The operation was performed with complete success, and we understand that the *post-mortem* examination, for the patient died, indicated a condition of the parts which would have amounted to a cure of the disease if the patient had survived. There was no paralysis of the lower extremities, nor any very strongly marked decrease in temperature.—*Brit. Med. Journal.*

PRACTICE OF MEDICINE.

CASE OF TRANSPOSITION OF VISCERA.

By R. Douglas Powell, M.D., M.R.C.P., Assistant Physician to the Hospital for Consumption, Brompton.

W. H., aged ten years, a delicate looking boy, but well developed and intelligent, is the fourth of a family of six children, two of whom died in early infancy. The parents are both living and healthy. The patient has had no serious illness, but his chest has always been delicate, and he has suffered from occasional attacks of dyspnœa, with pain in the right side, lasting for a few days and relieved by aperients. He has never had hemoptysis, but suffers occasionally from epistaxis.

He complained, upon first coming under my notice as an out-patient at the Brompton Hospital, September 16th, 1868, of some pain in the side, hacking cough with yellow expectoration, indifferent appetite, painful digestion, and confined bowels. The pulse was regular, of moderate frequency; the tongue clean. On inspection, no distortion of the chest or curvature of the spine was observed; the expansion with inspiration was fair and equal on the two sides. The right semi-circumference, an inch below the nipple, measured 11¾ inches, the left 12 inches; above the nipple, the right 12½ inches the left 12 inches, The pulmonary resonance was good, sibilant *rales* were audible, scattered over the chest, but there was no other auscultatory evidence of disease. The heart's apex beat in the fifth right interspace just within the nipple line. The upper border of the cardiac dullness corresponded with the fourth cartilage, its left border with the right margin of the sternum. The impulse and sounds were natural. In the ordinary hepatic region there was hollow resonance of the same character as the "stomach note." In the left hypochondriac region there was dullness below the sixth rib in the nipple line, and extending round to within not quite three fingers' breadth of the spine, where there existed a band of resonance of tympanitic quality. The margin of the liver could not be felt below the cartilages; the hepatic dullness could be traced anteriorly and to the right across the middle line to the mid-sterno nipple line, whence its lower margin slanted back again to the left, till it became lost under cover of the cartilages. No splenic dullness could be detected.

Dr. Hare was kind enough to examine the patient with me in October; and, having confirmed most of the above statements, he observed that the relative position of the testes was reversed, that on the right side being the lower. This was a point of some interest, since Dr. Hare had noticed the same thing in a case of transposition some years ago; and though the very general rule of the left testicle being lower than the right is not without many exceptions, yet that these two cases should be exceptional is worthy of remark, as tending to prove the general rule to be not merely numerical. A venous hum was audible on each side of the neck, loudest on the right side. On examining the blood microscopically, March 5th, 1869, no excess of white corpuscles, was found. No other fact of importance was noticeable.

Remarks.—This case seems worthy of being recorded, since, though several cases have been discovered in the dissecting room (one very fully described by Dr. Baillie, in the seventy-eighth volume of the *Philosophical Transactions*), very few have attracted attention during life. The diagnosis is extremely easy, if the nature of the case be once suspected; it rests mainly upon the facts of the cardiac impulse and dullness being on the right side, without any discoverable displacing cause, while the liver dullness is on the opposite side. Absence of splenic dullness is not uncommon; but in this case it may be due to the spleen being divided into many small splenculi, as in the case described by Dr. Baillie, and in one brought before the Pathological Society lately by Dr. Hickman. This patient is now much improved in general health and is growing fast. I have examined his mother and elder brother, neither of whom have any peculiarity in the position of the heart. The boy is right-handed. —*British Medical Journal.*

DEPRAVED APPETITE.

In the following case, Dr. Porter states that when he first saw the child its pulse was 190. When any of our readers have a patient recover after their pulsehas been 190, we will be much obliged if

they will forward us a report of the case. It must certainly be very rarely that a patient recovers after the pulse goes up to 190. We saw a young man a few days ago in this city at the County Hospital with our friend Dr. Holman, whose pulse was 156 from hemorrhage Epistaxis, and who is making a good recovery. From loss of blood, or in such cases as Dr· Porter gives, the pulse in exceptional cases may reach 190 and the patient live. But we think it a general rule, that if the pulse goes above 140 from inflammation of any organ, or from any specific fever, the patient will not recover.

On the 6th of January I was requested to see a little girl, aged ten years, the daughter of a small farmer, residing near Swords, where I had been doing duty during the short illness of my friend Dr. Davys. I was informed that the patient was suffering from severe sudden pain in the stomach and dry vomiting. On my arrival, I found the abdomen very much distended, tympanitic and tender on pressure; the tongue was furred and had sordes upon it; the pulse 190; the countenance was anxious and expressive of severe pain and impending dissolution. The bowels were obstinately constipated, and had been so for several weeks. There were frequent attacks of dry vomiting, and the stomach would not retain food of any kind for a considerable time. The legs were flexed and there was a peculiar death-like odor of the person. The urine was scanty, high-colored and offensive in odor. Upon minute inquiry, I ascertained that the appetite had been depraved, and that the patient had been habitually eating quanties of cinders for four consecutive years. I ordered anodyne fomentations, and an aperient draught, which the stomach rejected. I then had recourse to an enema, which was given under my directions by the intelligent midwife of the district. Much difficulty was experienced in the introduction of the tube, which was indented by the sphincter of the rectum, which kept up a pressure almost equal to that of a fœtal head when on the perinæum. After some gentle but persevering efforts the tube was introduced, and the enema caused the expulsion of quanties of scybala and cinders. The abdominal pain soon subsided, and also the swelling. The stomach was enabled to retain food, and the pulse fell gradually to the natural standard. In a week's time the child regained strength and was able to walk out and take exercise. A wish not to intrude too much on the valuable time of those whom I have the honor to address, and a desire to leave room for discussion, prevent me from dwelling too long on this case; but before I conclude I would wish to remark, that I made the most minute inquiry as to the existence of worms, hysteria, and insanity, and that I failed to discover any tendency to such affections; I am therefore at a loss to account for the existence of depraved appetite for so long a period as four years. The subject of depraved appetite has not received proper attention. In this case symptoms set in which might be mistaken for those of hernia or enteritis. I have known many cases in which life has been lost owing to organic disease consequent on malnutrition produced by the same cause.—*Brit. Med. Journal.*

ARSENIC IN DIPHTHERIA.

To the Editor of the Australian Medical Journal:

Sir:—You may be aware I have given a good deal of attention to the diagnosis and treatment of Diphtheria.

About eight months ago I had a troublesome, tedious case of skin disease. The patient, a child, at last got well under the administration of arsenic, in the form of Liq. Arsenicalis. About the time this child's disease began to improve, her brother got diphtheria, and it struck me, at the time, that it was rather strange she did not get it also, as she slept with him. This made me think, could the arsenic be acting as a prophylactic, and remembering the action of belladonna as a prophylactic in scarlatina epidemic, I determined to try the arsenic in the same capacity, and several cases coming on, at the time, of malignant diphtheria, I made a practice of prescribing mild doses of Fowler's solution to the other members of the family in which diphtheria appeared. I have the most satisfactory result to report, for not a single child took diphtheria, who had been given arsenic as a prophylactic, although in hourly contact with the plague. I write to mention the matter to you; perhaps some of the faculty in Melbourne will give the experiment a trial, and report results.

I am, dear sir, yours truly,

Alfred Shaw,
Resident Physician and Surgeon, Queenscliff.

A CASE OF FIBRO-PLASTIC TUMOR OF THE BASE OF THE SKULL, ASSOCIATED WITH LEUCOCYTHÆMIC CHANGES IN THE BLOOD AND SEVERAL GLANDULAR ORGANS.

The case is reported to the Boston *Medical and Surgical Journal* by Dr. Treadwell, of Boston. He says the woman was aged 22; sanguineo-lymphatic temperament. Her mother died of pulmonary phthisis at 49; one sister at 21. Always well until June, 1867, when a small, hard tumor was noticed in right parotid region, which grew for a year, while smaller ones appeared extending along the submaxillary region, and one on the opposite side commenced six months after the first.

A few months before her death, patches of ulceration appeared about the right temporal region. About two months since, the right eye became unnaturally prominent, and continued so for some time, when pus was discharged from above and below the eyeball. With the loss of sight and motion, there was also paralysis of the upper lid. About this time she became subject to mild clonic convulsions. During the first six months the general health suffered very little. She finally became extremely emaciated, and for the last two months was confined to her bed. She died February 23d, 1869, and was seen by Dr. Treadwell February 3d, 1869, for the first time, when the blood showed white corpuscles—seventeen in a microscopic field of moderate size—the same field showing only one in healthy persons.

Sectio-cadaveris—On removing the brain a morbid growth was found, involving the body of the sphenoid and basilar portions of the sphenoid and occipital bones, and extending into the right middle fossa of the base of the skull. The growth surrounded the second, third, fourth and fifth nerves of the right side, and the third and fourth of the left side. The bones involved by the disease were partially destroyed— absorbed. The portions remaining were cut through, and the growth found to involve the ethmoid and portions of other surrounding bones, and partially filled the nasal cavities. Three or four mucous polypi occupied the remaining portion of the nares.

Thymus gland enlarged, three and a half to four inches in length.

Lung; small cavity in left apex; small cheesy mass in right.

A few points in this case are worthy of special notice.

"The slow development of the disease, and the still slower deterioration of the general health—the disease existing at least twenty months, and the patient being able to be about until a short time previous to her death.

"The large increase of white corpuscles, with the enlarged thymus and lymphatic glands and supra-senal capsules."

"The loss of the physiological functions of some of the nerves involved in the morbid growth at the base of the skull, although the functions of the different nerves do not seem to have been impaired strictly in proportion to the apparent extent to which they were respectively involved by the disease. The right optic lost its functions, as shown by the blindness of the eye of that side, the growth involving the nerve at some distance anterior to the optic commissure, which remained healthy. The substance of the right nerve of the third pair—motores oculorum—and also the right one of the fourth pair—pathetici being involved in the right eye, together with paralysis of its upper lid—and such was the case. Although the fifth nerve of the right side was deeply buried in the morbid tissues, its functions were not much disturbed; which fact harmonizes perfectly with the result of the microscopic examination of its structure. The intigumentary ulcerations in the right temporal region may have been due to degeneration of the auriculo temporal branch; although, as previously stated, I could not detect any loss of sensation in any portion of the integuments covering the head and face. The functions of the other cranial nerves did not suffer impairment, with the exception of the sense of smell, which would, of course, be interfered with in consequence of the existing obstruction of the nasal passages. And lastly, the large relative increase of the white corpuscles of the blood, taken in connection with the enlarged thymus and lymphatic glands and supra-renal capsules, giving the case a decidedly leucocythæmic aspect, when viewed independent of the growth at the base of the skull, as it was during life."

"The morbid growth seems to have been identical with the *fibro plastic* growth of Lebert and Paget, and the *sarcoma fusiforme* of some of the German pathologists."

"What was the nature and course of the disease?"

"Was the morbid growth at the base of the skull the primary and main disease, and the glandular enlargements and increased number of white blood corpuscles mere sequelæ and concomitants? Or were the whole series of pathological changes due to some abnormity of the blood-making organs or processes? Or did the case present two different diseases, each independent of the other? The increased number of white corpuscles, the enlarged thymus gland and supra-renal capsules, and perhaps the enlarged lymphatis about the neck, all belong to leucocythæmia."

TREATMENT OF CHOLERA INFANTUM.

I know of no remedy which is better retained and puts a stop to the incessant vomiting of cholera infantum sooner than often-repeated teaspoonfuls of mint julep. Cold water and ice ought to be allowed *ad libitum*, and no regard should be paid to their immediate rejection by the stomach, for the soothing effects obtained and the relief they give will soon become apparent. Sinapisms and irritating embrocations to the epigastrium I consider worse than useless. But soft woolen cloths, wrung out of warm water and wrapped around the child from the axilla to the toes, I found to be grateful to the little patients, and to promote in a short time a healthful reaction. From two to five grains of the subnitrate of bismuth every two hours will be soon retained by a child under two years of age. The dark stools, of much less frequency, show that the medicine does good. The property of bismuth of adhering tenaciously to mucous membranes makes the drug very serviceable as a topical sedative, besides the constitutional medicinal effects which it is believed to exercise on irritated and congested mucous surfaces. In the protracted forms of diarrhœa, and especially in cases accompanied with much pain, this property of bismuth has the additional advantage of enabling the physician to combine with it Dover's powder in smaller doses than it is indicated; for the entanglement of the opiate with the bismuth allows of its longer retention, and consequently fuller absorption by the stomach; nor is it so apt to cause nausea when thus combined as when given alone. The timidity of administering opiates to very young children I do not share, and I can add my testimony to the highly beneficial effects often derived from them in the obstinate diarrhœas of children. When emaciation begins to show itself, the mild ferruginous preparations as first recommended by Dewees can safely be given. I give the preference to the following prescription:

R Ferri et Ammoniæ citratis, 3 ss.
Tinct. Columbæ, } aa. gtts. xxx.
Tinct. Nucis Vomicæ, }
Sacch. albæ, 3 iij.
Aquæ, 5 iij.
M. et Sig. Give a teaspoonful three times daily for a child between one and two years of age.

Frequent tepid baths and persistent sponging of the head and abdomen, when these parts show any increase of heat, do excellent service.—*New York Medical Journal.*

THERAPEUTICS.

COAL OIL.

Dr. John Mulvany contributes to the British Medical Journal an article on the above subject as a medical agent. He says:

Petroleum at one time, I believe, was officinal in our *Pharmacopœias;* but, owing to its impurity, and its *modus agendi* not being, perhaps, correctly appreciated, it fell into disuse, and at the present day is but little used, except by Indians and quacks. I was first led to suspect that it might possess therapeutic properties which would repay investigation by accidentally discovering that it was an excellent application for *Burns or Scalds.*

He afterwards used it as a dressing to *Ulcers,* Phligmonoid inflammation, *Chronic Duodenitis,* and prescribed it as follows: R. Olei petrolei 5ss.; chloroformi 3ss.; tincturæ cardam. co. 3j. M.

From fifteen to twenty drops were dropped on sugar, and taken three hours after each meal. My object in mixing the chloroform with it was to disguise the smell and taste. The cardamoms were simply intended to give it a color, and and still further disguise its taste.

Dysentery.—Soon after this, in the cold weather towards the end of February 1868, I became the subject of a rather smart attack of dysentery. The same reasoning which led me to administer it in the above case determined me to employ it *in propria persona.* So mixing an ounce of it with two ounces of water, I injected it into the bowel—not, I must confess,

without some little timidity, and with but little advantage. An hour subsequently, I injected two ounces of the oil, and the same quantity of water, with immense relief to the painful feeling of fulness in the rectum and the tenesmus. Encouraged by the almost instantaneous improvement, I two hours afterwards threw up between four and six ounces of the pure oil, retained it as long as possible, took a dose of castor-oil, and was free from all dysenteric symptoms next day.

As a local application to erysipelas and erysipelatious laryngitis, ischio, abscess, sprains, rheumatism, itch, and black-knot on trees, it proves in his hands equally efficacious.

Mode of action.—These few cases which I have selected from many others, will, I trust suffice to call the attention of the profession to what, in my opinion, will be found to be one of our most invaluable antiphlogistics. As a topical application to inflamed parts, it is, judging from my limited experience, unsurpassed by any other known remedy. It possesses also two other advantages, which materially enhance its value as a remedial agent. First, it is always at hand; and, secondly, it is extremely cheap, the very purest not costing more than 18 or 20 cents per gallon. Its mode of action is simple, combining, as it does, stimulant and astringent with anodyne properties. It acts by restoring tone to the paralysed contractile textures of the small arteries and veins whereby the retardation of the blood-current is overcome, the stagnant corpuscles urged from the capillaries and venous radicles into the general circulation, and the condition on which the transudation of the serum and blood etc., depends, removed; whilst, at the same time, it so materially expedites the absorption of the effused fluids that the parts, swollen by the products of effusion or capillary rupture, shrink with such celerity as to give the part a shrunken, wrinkled, and brawny appearance in, at least, twenty-four hours. It may be that it is owing to this shrinking that the rapid cessation of pain is produced. It does, however, unquestionably releive pain even where there is no inflammatory effusion, and, I am inclined to think it exercises an anodyne influence, by directly acting on the nervous filaments distributed to the cutis. When rubbed on the skin, or thrown on it in a fine spray by means of an atomiser it produces a sensation of numbness and of partial insensibility which soon passes into a pricking sensation, then becomes hottish, and soon passes off. Trying to remove its disagreeable smell, I passed it, in a state of vapor, into a bottle of chlorine gas. A heavy oily compound resulted, devoid of the characteristic odor. I applied some of this to my wrist, but it caused so much pain and smarting, that I imagined I had discovered an instantaneous blistering fluid. It did not, however, vesicate, and the pain soon passed off.

The efficacy of coal-oil in the treatment of black knot and itch show its to be destructive to the lower organisms; on which account it might probably be useful in those cases in which carbolic acid is embloyed.—*Philadelphia Reporter.*

PATHOLOGY.

REMARKS ON THE PATHOLOGY OF CHOREA.

By W. H. Broadbent, M. D., M. R. C. P., Senior Assistant-Physician to St. Mary's Hospital and the Fever Hospital.

In the session 1855-6, I read at the Medical Society a paper on Chorea, which I withheld from publication at the time, in order that, by further reflection, I might mature the opinions I advanced, and obtain a greater amount of clinical evidence than I then possessed on some of the points bearing on the question raised.

The chief object of this communication was to show that chorea was not the manifestation of a general condition, whether of the nervous system, as is still commonly held, or of the blood and tissues generally; but an affection of the sensori-motor ganglia at the base of the brain, the corpora striata, and the optic thalami. Dr. Russell Reynolds had already enunciated and ably maintained this view in his work on the *Diagnosis of the Diseases of the Nervous System;* and Dr. Hughlings Jackson, who was present at the meeting of the Socicty, had independently arrived at a similar conclusion, and had, moreover, assigned a precise character to the lesion of the ganglia by applying the theory of Dr. Kirkes as to the causation of chorea—*i.e.*, embolism of their vessels. These views he has recently developed more fully in an able paper in the *Edinburgh Medical Journal.* It appears to me that chorea is to be regarded as a symptom rather than as a disease, and that it cannot be referred to any single pathological condition. This is what I now endeavor to establish.

It is not necessary here to employ arguments against the opinion that chorea is the expression of a special "diathesis," as described by the late professor Trousseau, although an hypothesis equivalent to this seems to be extensively held—*i. e.*, that it is due to functional irritation of the nervous system by blood containing some morbid element. If it can be shown that the sensori-motor ganglia alone are affected, this supposition is excluded, without the need of direct disproof.

The considerations which form the basis of the conclusion, that the seat of the morbid changes, to which the symptoms of chorea are due is the corpora striata and optic thalami, are as follows:

1. The cerebral hemispheres are not involved, as is seen by the fact that, in a typical case, there is primarily no affection of the intelligence. It is true, that, in some cases, the mental faculties are obviously enfeebled, and sometimes there is acute delirium; but in these instances we have chorea *plus* impairment of intelligence—an affection of the hemispherical ganglia, in addition to the affection of the sensori-motor ganglia. It is true, again, that we may have considerable structural damage in the hemispheres without apparent loss of any of the intellectual faculties; and this weakens in some degree the conclusion that absence of intellectual derangement in chorea implies absence of lesion in the hemispheres. It would not be easy to show positively that the cerebellum is not involved; and, as the attempt would necessitate some discussion of the function assigned to the cerebellum, it will not here be made.

A point of greater importance is to show that chorea does not arise from any morbid condition of the cord. The following considerations on this question are advanced by Dr. Russell Reynolds.

"1. Clonic spasm of the incessantly repeated character is not a phenomenon of persistent spinal irritation. (Tonic spasm is a mark of such a condition).

"2. The movements (unless very severe, and even then to some extent) are generally controlled by the will; and it is certain that the purely (asensuous) reflections are not amenable to volition, or, at all events, to the same extent.

"3. The spasmodic movements cease during sleep, whereas the phenomena of excito-motor character are increased by this removal of volition. The direction of attention to

some other object likewise diminishes the intensity of choreic movements.

"4. The special occasion of increase or of induction of choreic movements are the attempts at volitional action and the emotional changes."

These arguments are open to criticism, and could not be accepted as conclusive. They have, however, considerable weight especially when taken in connection with the following, which I have added.

5. Tickling the palm of the hand or the sole of the foot does not excite exaggerated reflex action. If the choreic movements were due to abnormal excitability of the cord, or an undue readiness to respond to impressions, tickling is the kind of stimulation which would, of all others, render this manifest. I have now tried the experiment in a great number of cases. Not uncommonly it causes some amusement to the patient, and there are grimaces and movements due to this emotional state; but, when the smile or laugh has passed off, the tickling is borne without any difficulty, and there seems frequently to be less difficulty in controlling the tendency to reflex actions than in health. Sometimes the tickling is not felt, as such, at all.

6. The most conclusive evidence, however, that the phenomena of chorea are not of spinal origin, is furnished by their unilateral character. Almost invariably, the twitchings come on first in one arm and leg, and often last for some time in the limbs of one side before extending to those of the other. (See Dr. Russell's paper in the *Medical Times and Gazette* for May 31st, 1868.) Throughout the affection, again, they usually predominate on one side or the other; and cases are not uncommon in which the chorea is unilateral from first to last—unilateral, that is, so far as the limbs are concerned, though more or less bilateral in the muscles of the eyes, chest and abdomen.

The Doctor also gives the history of a number of interesting cases of the disease.—*British Med. Journal.*

IS CANCER A BLOOD-DISEASE?

The question raised by Mr. De Morgan, at the last meeting, of the Pathological Society, as to the constitutional nature of cancer, is one of the highest importance. The almost universal opinion that cancer is what is called a blood-disease, is founded partly on the very frequent recurrence of the disease after operation; partly on its wide distribution when once formed; and partly on the evidence, so frequently afforded, of hereditary tendency.

A protest against this opinion was raised by Mr. Moore; and Mr. De Morgan has taken the same view. It was argued at the Society that a great, if not equal, tendency to recurrence is found in the case of tumors which are not cancerous, as in the specimen of cystic sarcoma exhibited at the meeting; that diseases not cancerous are distributed when once formed; and that hereditary tendency is as strongly marked in the simplest tumors as in cancer—as, for example, in a case of hereditary fatty tumor mentioned by Mr. De Morgan. It is indeed familiar to all that peculiarities of nutrition in the parent, of whatever kind, are constantly transmitted to the offspring.

The argument advanced by those who deny the constitutional nature, in the ordinary acceptation of the term, of primary cancer, is that prior to, and for a long time after, the appearance of a cancerous tumor, the constitution is distinguished, in most cases, by its healthy characters, and by the absence of any appearances which would indicate disease.

Mr. T. Smith asked, if the evidence of constitutional taint was absent in cancer, where it could be found? What was a blood-disease, if cancer were not? Mr. De Morgan referred to the constitutional characters seen in struma before any deposit of strumous matter took place; and Mr. Moore alluded to small-pox as an instance of what one would expect if the blood were primarily diseased—viz., the general and simultaneous appearance of the disease over the body—whereas, in fact, small-pox was generated into blood from a matter first introduced into it, which interjected or inhaled substance was equivalent to the primary tumor, out of which general cancer spread.

Then, again, they argue that, if in these non-cancerous tumors we get recurrence and distribution, as in the case presented, it affords a strong ground for belief that the same cause is in operation in both cases; and that the *onus probandi* of the contrary rests with those who maintain that the recurrence and distribution in cancer are evidences of previous general tendency to disease. Mr. De Morgan and Mr. Moore look on this recurrence in both cases as an evidence that some of the elements of the original disease are carried in the liquids of the body, in blood-vessels, or lymphatics, or spaces in the connective tissue, to a greater or less distance; the extent to which this tendency exists being a question of more or less; that, as we find some forms of cancer far more disposed to distribution than others, so cancerous tumors generally may be more disposed to it than other tumors.

The great question which is thus raised is as to the propriety of early operation. If, in the first place, the disease is purely local, but with a structure which allows of the free dissemination of its elements, it is obvious that the earlier and more completely it is removed, the greater the prospect of future immunity. Mr. T. Smith's observation, that it ought to be shown that early and thorough operations do preserve the patient from recurrence, is important; but it is obvious that no logical proof can be given, since surgeons rarely or never see the disease in its early stages. The subject ought not to rest here; and we should be glad if the question could be more thoroughly discussed than is possible at the meetings of the Pathological Society.—*British Med. Journal.*

OBSTETRICS.

OVARIOTOMY; PEDICLE SECURED BY SILVER-WIRE LIGATURES; CURE.

By J. Marion Simms, M.D., Senior Consulting Surgeon to the Women's Hospital, etc.

Miss X, aged 58, had enjoyed good health until 1864, when she discovered some enlargement in the left side of the abdomen. In 1866, she saw Dr. Atlee, of Philadelphia, who diagnosed a non-adherent multilocular ovarian tumor; but, as her general health was very good, he wisely advised her to wait a while for an operation. The tumor gradually increased till the abdomen assumed huge proportions; and I saw her in December, 1868, and confirmed Dr. Atlee's diagnosis. Her appetite was failing; she did not sleep exeept in a semi-erect posture; she vomited occasionally; her pulse was ninety-eight; her skin was dry and parched; and she was emaciating very rapidly. I saw her a month later, and her symptoms were then so urgent that I felt no hesitation in recommending either a tapping or an operation for the removal of the tumor. She selected the latter, and the operation was performed on the 1st of February last.

Dr. Goodwillie administered Dr. Richardson's new anæsthetic, the bi-chloride of methylene. She was about twenty minutes coming under its influence, and vomited once just before she was fully narcotised. I was assisted by Dr. Swinburne, Health officer of the port of New York, by Dr. Sands, of Newport, Dr. Meaux, of New Orleans, and Drs. Lee and Reed, of Staten Island. The incision, about three and a half inches long, was made in the usual way; the walls of the abdomen were loaded with fat, which alone was more than two inches thick. The tumor had slight adhesions anteriorly over a space of six or eight inches square, which were easily broken up by sweeping a uterine sound over the surface of the tumor. Five or six large cysts were successfully tapped; then the incision was enlarged upwards for two inches or more, to allow the remaining solid part of the tumor to be extricated. This consisted of small semi-solid cysts so intimately blended together, that the irregular mass, larger than the human head, felt almost as firm as if it had been a real fibroid tumor. The pedicle was short, broad and thick.

My special object in reporting this case now, is to again call the attention of the profession to my method of dealing with the pedicle. In this case, the walls of the abdomen were so thick, and the pedicle so short, that it would have been impossible to secure the pedicle in the usual way by the clamp externally, even if I had wished to do so. For more than twenty years, I have taught that the best plan of dealing with the pedicle was to secure it with silver-wire ligatures, and drop it back into the pelvic cavity. If the pedicle be small, it is enough to transfix it with a double silver wire, and secure the two halves of the pedicle by firmly twisting the wires on opposite sides. If the pedicle be broad it requires a number of separate wires, according to its width. In a case of ovariotomy, reported in this journal in January, 1867, the pedicle was five inches wide, and required five separate wire ligatures, each embracing a separate segment of tissue about an inch wide. In the case here reported, three wire ligatures were necessary, each enclosing about an inch of tissue. In the former case the pedicle was first severed by the actual cautery, according to Mr. Baker Brown's plan; and when the clamp was loosened, blood oozed out all along the cauterised surface. As this was almost in contact with the body of the uterus, there was no other method but to secure the bleeding stump, just as I did it. In this case, the pedicle was held firmly by a pair of suitable forceps; the tumor was then severed and removed. Three separate wire ligatures were passed through the pedicle as it was held in the forceps; each twisted separately and firmly, just as we do with the wire sutures in the operation for vesico-vaginal fistula, and with the same apparatus; each twisted end was cut off within a quarter of an inch of the tissue embraced, and then bent flatly over on it. The wires became deeply imbedded in the parts and almost hidden from view. After the ligatures are satisfactorily adjusted, the stump of the pedicle may or may not require a little trimming, when it is allowed to fall gently into the cavity of the pelvis.

This case required eight deep silver sutures for closing the external wound. I am always careful to pass them so as to embrace the divided edges of the peritoneal coat. A piece of lint, wet with a carbolic lotion, was laid over the wound, and secured by a bandage and a large compress of cotton wadding. The urine was drawn off for three days. There was no constitutional disturbance, and the patient was convalescent from the moment of the operation. There was no vomiting after the operation, as we so often see when chloroform is used. The tumor was multilocular, and weighed sixty-seven pounds and a half. Dr. Swinburne thought its real weight was over seventy pounds; for a large quantity of fluid was lost in the tapping. One great superiority of this method of securing the pedicle and the abdominal incision is, that we have no trouble with the after-treatment. On the eighth day after the operation we removed the bandage, and examined the abdominal incision for the first time. There was complete union, and we removed four of the wire sutures; the others were removed on the following day. The bowels were opened by enema on the seventh day after the operation; and her convalescence progressed without the slightest untoward symptom.—*British Medical Journal.*

Faubourg St. Honoré, Paris.

CASE OF TWINS: FOLLOWED BY EPILEPTIC FITS AND DELIRIUM.

By Edward Sandwell, L,R.C.P.Ed.

On February 10th, at 1 P.M., I was called to see Mrs. S., whom I was engaged to attend in her confinement. She had gone the full period. She was having continuous but feeble pains. The membrane had broken early in the morning, the pains continuing regularly until 10.30 P.M., at which time I delivered her of a living male child, the head presenting. On making an examination I found another bag of membranes, containing another child, the head presenting as before. On rupture of the membrane, two or three sharp pains proved sufficient to expel another male child, but dead, and partly decomposed. In a few minutes I removed the placentæ, quite distinct from each other. I left her doing thoroughly well, at 11.30 A.M.; but at 5.30 A.M. on the 11th, six hours afterwards, I was called hurriedly to her. I then found her in a fit of a distinct epileptic character. I ordered ice to her head and the usual remedies. This first fit was followed by one every twenty minutes, without any conscious intermission for twenty-six hours. Then partial consciousness returned, but with it delirium, which lasted until the third day. I now prescribed a pill of four grains of calomel, and a quantity of opium; and also gave her a quantity of nourishment. She gradually improved, and took tincture of cinchona, with ammonia, every four hours. On the eighth day she complained of her breasts; they had filled rapidly, and became somewhat nodulated. I ordered them to be rubbed with equal portions of brandy and sweet oil, which relieved her after two applications. On the tenth day she took the child to suck, and has now had it for forty-eight hours, and both mother and child are doing as well as could be under the most favorable circumstances. No uterine symptoms have shown themselves. Mrs. S. had never had epileptic fits; she had been subject to fainting fits, but had been free from them during pregnancy. Her mother died in childbed. The whole of the family are highly nervous.—*British Medical Journal.*

MISCELLANEOUS.

STRANGE MONSTROSITY.

We have received the following singular account from a gentleman in New York: "A correspondent of the Dantzic *Gazette* writes as follows, from Dirschau: 'Last Sunday, February 1st, at Schliewen, near Dirschau, a young and blooming shepherd's wife was delivered of a girl, otherwise sound, but having on the lower part of her back (*auf untermo Ruckentheile*) a tumor as big as two good sized fists. In this

tumor, which is covered by the skin, is a very lively fœtus, whose well developed mass may be felt through the walls of the tumor. Its limbs indicate a growth of from five to six months. The father called in the health commissioner, Dr. Preuss, from Dirshare, and begged him to remove the tumor, together with the fœtus. The Doctor, however, after he had long and carefully examined it, declared that there was a possibility in this extraordinary case, of the child in the tumor (whose existence and active motions were palpable to all present) coming to fruition. No physician could be justified in destroying this marvellous being. Rather it ought to be protected and cherished. The new-born girl is of unusual strength and beauty, and takes the breast very cheerfully.'" *Medical and Surgical Reporter, Philadelphia.*

THE CASE OF DR. EARLE.

Our lively contemporary of the *Gazette* thus discourses: "Tony Weller's impressive warning to his son, 'Samivel, beware of widders,' has received striking corroboration in Chicago, in the experience of Dr. Earle, of that city. His 'captiwation' in matrimony, some years ago, by a female of that description, was followed, according to the custom of the community in which they resided, by a divorce. Not having learned that to make overtures towards reconciliation to a woman who has injured one, is invariably considered by her as an unpardonable outrage, he imprudently sought to revive her affection; and roused to revenge by this crowning injury, she had him arrested on charges compared with which the wildest imaginings of 'blood and thunder' romancists sink into insignificance. Mutilated infant corpses in bureau drawers, or used as fuel in his office grate; smothered wails of infantile anguish issuing from unexpected corners; truculent boasts of his murderous exploits, and gleeful demonstrations of their details. These are some of the items of the tale she tells, and as its consequence, Dr. Earle is now in prison. The whole question hinges on the credibility of emale testimony, and we think that as a general formula, it may be stated that a woman's veracity is in inverse ratio to her malevolence."—*Chicago Medical Journal.*

ANCIENT AND MODERN TREATMENT OF INJURIES.

Sir:—It is quite refreshing to an old practitioner to read in the journals now and then a communication from some one bold enough to write in defence of the heresy of his earlier years—the antiphlogistic treatment. Such was a paper by my friend and colleague Mr. Prichard, which appeared in our journal some months ago; and such is a letter from Mr. Pope, of Cleobury Mortimer, in the last number. I think Mr. Pope is rather hard upon Mr. Lane. He does not take into consideration the difference in stamina between town and country patients. It is rather amusing to find him speaking of the *vis medicatrix naturæ* as "our great friend," whilst advocating pretty freely bleeding, purging, calomel, and starvation. Nevertheless, Mr. Pope is right in doing honor to the *vis medicatrix*. Dame Nature is, indeed, after all, the real doctor. What *we* have to do is to leave her to her own resources when she is equal to the occasion, and to assist her when she is not; prescribing for one patient antiphlogistic measures, and tonics and stimulants for another, according to the indications presented by each; taking each case according to its own merits, irrespectively of system. The homœopath has taught us what the *vis medicatrix naturæ* can do; let us teach him the importance of timely and well-adapted treatment in aid of it. I am, etc.,

W. F. Morgan.

Honorary and Consulting-Surgeon to the British Royal Infirmary. Bristol, March 1869.—*Brit. Med. Journal.*

PROF. ROBLEY DUNGLISON.

In speaking of the great loss which the profession has sustained by the death of this distinguished writer and teacher, the Philadelphia Medical and Surgical Reporter says: "Dr. Dunglison was born at Keswick, Cumberland, England, in 1798, and graduated in London, 1819. He was invited to this country in 1824 to take part in the establishment of Jefferson's favorite project, the University of Virginia. From this arose an intimate acquaintance with Jefferson, Madison, and other greatmen of a past generation, which naturalized him at once in his adopted country, and he thenceforth became in all respects thoroughly American. In 1833 he left the University of Virginia for a chair in the University of Maryland, and when in 1836 the Jefferson Medical College in Philadelphia was reorganized, he was invited to fill the professorship of Institutes of Medicine. Here he remained for more than thirty years, during a large portion of which time he was Dean of the Faculty; and the success of that institution was largely owing both to his attractive courses of lectures and to the remarkable tact and practical sagacity with which he administered its affairs. He kept to his post and faithfully discharged its duties for some years after failing health admonished him to seek the repose he so much needed, and he did not retire until the close of the session of 1868."

Female Physicians.—The objection to women practising medicine, it is stated, dates back to 1421, when a petition was presented to King Henry Fifth, that "no woman use the practyse of fisyk, under payne of long emprisonement."

Hypodermic Injection and Blisters.—In order to avoid the pain produced by blisters, M. Bricheteau gives a hypodermic injection of morphia at the moment of applying the blister.

The Therapeutic Effects of Lupuline.—M. Mèhu finds that the resin of hop, in the dose of twenty to thirty grains, produces often an intense headache; sometimes nausea, and even slight vertigo; and always a state of insensibility, lasting several hours, but without hallucinations such as haschish causes. Each time he has found a subsequent and notable increase of appetite.

A Milk-diet in Disease.—M. Leclerc and Professor Hirtz of Strasbourg have endeavored to study accurately the use of an exclusively milk dietary in disease. The quantity of milk calculated for an adult is four pints daily. It should be examined as to quality. Milk is an aliment of easy and rapid digestion, which leaves little residue, favoring diuresis. This *regime*, strictly followed, has rendered great services, especially in organic affections, ulcerations of the digestive tube, hypertrophy of the heart, and dropsies.

A Chance for Mr. T. S. C. Lowe's Refrigerator.—The Brazilian Government has offered a reward of $8,000 in gold to the inventor of any practical mode of preserving beef for exportation. More than four hundred experiments have been made but none have succeeded.

Singular Effect of a Burn.—Dr. S. P. Crawford is the authority for the following history: A lady being in the last stages of gestation, was so severely burned upon the face, body, and extremities, that she survived the accident but twelve hours. A short time before death she gave birth to the child, at full maturity, but still-born. It bore the mark of the fire corresponding to that of the mother. Its legs, arms, and abdomen were completely vesicated, having all the appearance of a recent burn.—*Nashville Journal of Medicine and Surgery.*

NEW ALMADEN VICHY WATER.

A new mineral water bearing the above name is brought before our notice. By the analysis of Mr. Piquet, of this city, it is found to bear a very close resemblance to the celebrated Vichy Water of France, which we need scarcely to remind our readers is a thermal water, holding in solution bicarbonate of soda and lime with other alkali salts, a trace of iron and a little free carbonic acid.

This California Vichy is a cold water containing the same alkaline salts and carbonic acid as its French relative, but a larger proportion of iron.

As presented to us, in bottle, it is pleasant to the taste, bright, clear, and somewhat sparkling. It is put up with considerable care, and very well corked.

Unless we are much mistaken, a great success will attend this water; it carries an intrinsic success in its therapeutic principles. In many respects for medical purposes, it is far superior to us in California, than the Vichy we obtain from France—that article is always somewhat decomposed by the voyarge and its taste is flat and insipid from the loss of its carbonic acid.

KENTUCKY SCHOOL OF MEDICINE.

LOUISVILLE, Ky., May 20th, 1869.

At a meeting of the Faculty of this School May 13th, the following preamble and resolution were unanimously:

WHEREAS, The medical colleges of the United States have, hitherto, in vain sought for an expression of the wish of the American Medical Profession in regard to the amount of fees proper for a single official course of collegiate lectures; and

WHEREAS, The American Medical Association did, by a vote conspicuously unanimous, decide on the 6th of May, 1869, that $120 should be accepted as MINIMUM amount to be charged for such a course of lectures; and

WHEREAS, This vote is morally and honorably binding upon all who personally or by delegated authority entered into it; and

WHEREAS, The Faculty of the Kentucky School of Medicine, in common with all reputable members of the medical profession, accepts the decisions of the American Medical Association as representing, through its delegated organizations, the sentiment and desire of the great body of American physicians;

Be it hereby resolved, That the Faculty of the Kentucky School of Medicine acknowledges this officially expressed wish of the Association as its guide in this relation, and that it will hereafter charge $120 for each official course of its collegiate lectures. L. J. FRAZEE, M. D., Dean.

The above speaks for itself. We hope to have the pleasure of acknowledging the receipt of many more such worthy examples of promptness and progression on the part of medical Faculties.

MICRO-CHEMISTRY: METALS IN DRINKING WATER.—A late number of the *Philosophical Magazine* contains a new method of measuring minute traces of lead and other metals in drinking water. It is capable of measuring units of metal in 100,000,000 parts of water, and is the work of Professor Wanklyn and Mr. Chapman.

PROFESSOR SYME.

We are most pleased to be able to state that, since his attack of partial paralysis on Tuesday of last week, Professor Syme has made an uninterrupted and gratifying progress for the better. The motor power *only* was affected by the attack; and in this some improvement has been visible daily and steadily, so that now, only eight days after the attack, he is able to walk without support. The friends and admirers of the great surgeon and teacher—and they number legion—will be able to draw the most favorable auguries from the progress already made.—*British Medical Journal*, April 17th.

PATENT MEDICINES IN ENGLAND.—Stamp duty was paid in the year ending March, 1868, on no less than 8,060,754 packets, boxes, etc., of medicines, selling at 1s. or more. The tax produced £62,556.

MORTUARY REPORT OF SAN FRANCISCO FOR THE FIRST QUARTER OF 1869, ENDING MARCH 31.

CAUSES OF DEATH.

Abscess	1	Fever, Undefined	1
Abscess of Liver	3	Fracture of Skull	1
Abscess of Lungs	1	Do. of Spine	1
Anasarca	1	Gangrene of Lungs	2
Anemia	3	Gastritis	4
Aneurism	2	Gastromalachia	1
Aneurism of Aorta	7	Gunshot Wounds	3
Angina Pectoris	1	Hemoptysis	4
Apoplexy	12	Hepatitis	4
Ascites	15	Hydated of Liver	1
Asthma	3	Hypertrophy of Liver	2
Atrophia	2	Hydrocephalus	19
Bright's Disease	5	Hydrothorax	6
Bronchitis	8	Inanition	10
Burns	5	Ichoremia	1
Cancer	5	Injuries of the Head	1
Do. of Brain	1	Do. unspecified	4
Do. of Kidneys	2	Intemperance	2
Do. of Liver	2	Laryngitis	1
Do. of Lungs	2	Jaundice	2
Do. of Stomach	5	Malformation Congenital	1
Do. of Rectum	1	Marasmus	23
Do. of Uterus	3	Measles	1
Carbuncle	1	Meningitis	25
Childbirth	3	Do. Cerebro-spinal	1
Cholera	1	Do. Tubercular	9
Do. Infantum	5	Metro-peritonitis	1
Cirrhosis	1	Nephritis	1
Colic	1	Occlusion of Bowels	1
Congestion	1	Œdema of Lungs	1
Do. of the Brain	9	Old Age	7
Do. of the Lungs	5	Opium	1
Congestive Chill	2	Do. Poisoning	1
Convulsions	31	Paralysis	7
Croup	24	Peritonitis	1
Coxalgia	1	Phthisis	119
Cyanosis	2	Pleuritis	2
Debility, General	12	Pneumonitis	55
Delirium Tremens	6	Premature Birth	7
Dentition	5	Purpura	2
Diarrhœa	2	Pyemia	3
Diphtheria	19	Rheumatism	2
Diseases of Heart	36	Rupture of Uterus	1
Do. of Kidneys	1	Do. of Blood Vessel	1
Do. of Liver	2	Scrofula	2
Do. of Spine	1	Softening of Brain	8
Do. of Uterus	1	Strangulated Hernia	1
Drowning	5	Suffocation	3
Dysentery	4	Suicide	9
Edema of Glottis	1	Syphilis	3
Embolia	2	Toxemia	2
Enteritis	11	Trismus Nescentum	1
Epilepsy	2	Ulceration of Bladder	1
Erysipelas	5	Do. of Bowels	1
Exhaustion	4	Unknown	10
Fever, Intermittent	1	Variola	192
Do. Scarlet	43	Whooping Cough	12
Do. Typhoid	12	TOTAL	946
Do. Congestive	1	Stillbirths	62
Do. Typhus	5		

AGES.

Under 5 years	324	From 40 to 60 years	169
From 5 to 10 years	66	From 60 to 80 years	36
From 10 to 15 years	18	From 80 to 100 years	5
From 15 to 20 years	22	Unknown	3
From 20 to 40 years	303	TOTAL	946

SEX.—Male, 609; Female, 337.

COLOR.—White, 866; Copper, 60; Black, 20.

ORIGINAL COMMUNICATIONS.

TWO CASES OF SEVERE STRICTURE OF THE RECTUM.

By JOHN SCOTT, M.D., F.R.C.S.IRELAND, SURGEON TO CALIFORNIA STATE WOMEN'S HOSPITAL.

On the 2d of January, of the present year I was consulted by a lady for disease of the rectum, with the following history: aged 32, she had been married twice and had had two children by her first husband. Eight years ago her youngest child had a prolonged illness which eventually proved fatal; for a fortnight she seldom left the sick room and during that time she principally subsisted on strong coffee, while she totally neglected her bowels, which became obstinately constipated. Some time afterwards acute dysentery set in, then an abscess formed close to the rectum, ending in the formation of a fistula in ano. For this latter she underwent an operation which proved unsuccessful and eventually it was found that stricture of the rectum existed. She was at this time under the treatment of an eminent surgeon of New York, and as her local and constitutional sufferings were great, he recommended her to submit to an operation for the removal of the stricture. The stricture was divided by the knife, but was followed by so profuse a hemorrhage that the patient was placed in considerable danger before it could be successfully restrained, and was followed by the formation of a large abscess outside of the wall of the rectum which reduced her to the last extremity. On recovery from the operation the stricture was dilated by bougies, but at no time could a larger size than a No. 4 be passed, and up to the time I saw her she was entirely dependent on them for relief.

PRESENT STATE.—Complexion sallow and unhealthy, appetite capricious, suffers from frequent fever and headache, bowels constipated and when purgative medicine is taken it is frequently rejected, relief coming in the form of diarrhea. The motions do not exceed the diameter of the little finger and are voided in small pieces. On examination the anus was found much contracted and indurated, and about an inch and a half up, the gut was so narrowed and indurated that only a portion of it could be penetrated by the finger; at the seat of stricture the bowel was felt much thickened when examined through the vagina.

TREATMENT.—I explained to the patient that I considered it possible to remove the stricture by an operation which would not entail the use of the knife, and having obtained her permission I proceeded to put it into execution. Bougies smeared with Ung. Hydrag. Fort. were passed daily until I had reached No. 6, by which time slight tenderness of the gums had taken place; a dose of oil followed by a warm water enema was then administered and the patient was put under chloroform. I first ruptured the sphincter ani fully and passing up the forefinger of my left hand I succeeded with considerable difficulty in forcing it through the stricture, while I steadied the gut by pressure with the finger of the right hand in the vagina. I then passed up two fingers, which I also got through after some time and with them I dilated the strictured portion as much as possible. Half an inch higher up I discovered the existence of a second stricture, consisting of a tense circular contraction of the gut, firm and cord-like to the touch but without thickening, into which I forced my two fingers but which I found quite undilatable. Having separated my two fingers as much as possible I introduced a No. 4 rectum bougie into the groove so formed and suddenly passed it completely through the entire stricture, which gave way as suddenly as if a bow string had snapped asunder. On withdrawing my hand I was enabled with perfect ease to pass a No. 10 rectum bougie to the sigmoid flexure of the colon, and the operation was complete. Dr. Bennett was present and rendered me most valuable assistance. On recovery from the chloroform the patient expressed herself as perfectly easy and free from pain and could scarcely believe that any operation had been performed; not more than one ounce of blood had been lost. About three hours afterwards abdominal pain and a feeling of general soreness was experienced, but before my second visit in the afternoon they had quite disappeared, convalescence was uninterrupted, and by the 8th day the patient was up and about, only experiencing a slight soreness as the fæces passed over the tender parts, the bowels were acting naturally and the motions were increasing in size daily. Fourteen days after the operation I became anxious to ascertain if the stricture had disappeared, and fearing lest the bowel might contract in healing if occasional dilatation were not practised, I asked leave to pass a bougie. With the greatest ease I passed the largest sized bougie—a No. 12, completely up to the flexure and felt not a little gratified by the result; my gratification was however short lived, for pain all over the abdomen soon set in and an attack of colitis was the result. Opiates and warm poultices at length subdued the attack, but it was quite three weeks before it passed off and for some time longer there was considerable pain on defecation; a change of air completed her recovery and I have now the satisfaction to report that every trace of the stricture has disappeared, the rectum is of nominal dimensions, not a particle of the thickening remains, the motions are of full size and the patient is in excellent health and completely relieved from the sufferings she endured during the last eight years.

CASE NO. 2.—Just a week after seeing the previous case, a patient was admitted into the "Woman's Hospital" suffering from the same affection. The following is furnished by my able assistant Dr. W. H. Davies, from the hospital case book: Mrs B——, aet 44; married; admitted Jan. 8, 1869.

HISTORY.—About 15 years ago had an attack of rheumatism and took a large quantity of Holloway's pills, Vin. Colchici, etc. An attack of dysentery was produced and much blood was passed from the bowels, she then recruited and went to Napa, but never quite got rid of an unpleasant feeling in the rectum. About 10 years ago mucous discharges began to come from the bowels and gradually increased in quantity, the motions becoming smaller in size and passed with great pain. Has constantly taken purgative medicines, particularly rhubarb, and has consulted many physicians but none of them advised any interference with the rectum. Bougies were afterwards passed but she believes none of them penetrated the stricture. Has had synovitis of the right knee, pains in shin bones, and copper colored eruptions, all pointing clearly to a venereal history. Has taken Iodide of Potash and Fowler's solutions, but can never tolerate the former beyond a few days.

PRESENT STATE.—Patient very emaciated, eruptions over hands, arms and face, bowels constipated, motions very small, coming away in little pieces with great pain and attended by large mucous discharges. On examination the anus was found red and inflamed and on passing the speculum the rectum was seen ulcerated and the mucous membrane livid and hypertrophical. About an inch and a quarter from the anus the finger came in contact with a dense stricture of fully an inch in length, it admitted the forefinger with diffi-

culty and felt ragged and uneven to touch, above the stricture the gut was almost entirely *occluded* by a very tight circular contraction. The portion of bowel occupied by the stricture felt through the vagina like a piece of rope, so much fibrin has been effused in the cellular tissue surrounding it; a quantity of blood and mucous was passed after the examination.

TREATMENT.—Under the administration of Iodide of Potash the eruption soon disappeared, but the system soon refused to tolerate the drug in any form. Rectum bougies smeared with Ung. Hydrag. Fort. were passed daily till the gums became touched. On the 26th, the bowels having been emptied and the patient put under chloroform I ruptured the entire stricture precisely in the same manner detailed in the preceding case. On passing my hand higher up after the rupture I found the upper part of the rectum enormously dilated and the coats of the bowel very thin, and immediately I withdrew it, an enormous fæcal accumulation, which seems to have lodged there for months, came away. The largest sized Rectum bougie No. 12, passed with ease and the patient was put to bed. Convalescence went on steadily but the patient was slow in regaining her health. Beyond a feeling of *soreness* and slight pain on having her bowels acted on, with a slight acceleration of the pulse and a little thirst, there were no other symptoms to indicate that an operation had been performed.

I took care not to interfere with the bowel farther than to have a large warm water injection thrown up occasionally, and the diet was almost exclusively milk and lime water. I should have mentioned that in each case I left a suppository of three grains of opium in the rectum after the operation.

On April 7th the patient was in excellent health and every vestige of the stricture had disappeared. I passed a No. 12 rectum bougie completely up with perfect ease and ascertained by pushing up the finger that not a trace of thickening remained, the bowels were acting naturally and the motions of a perfectly natural size.

REMARKS.—I cannot but believe that the preceding cases will be regarded with great interest by the profession for several reasons. Stricture of the rectum is confessedly one of the most distressing maladies incident to humanity, the sufferings it entails are very great, and where it exists in a marked form as in the preceding cases, life itself is continually in peril, from the mechanical obstacle it presents to the passage of the fæces, and particularly where any inflammatory attack is super-added.

So far as I am aware, the treatment adopted is entirely *original*, at least I have never seen it advocated in any medical publication, and a medical man of high standing in New York, one of the Surgeons to Bellevue Hospital, writes to a medical friend of mine that it has not been performed in that city. The only treatment laid down for such cases is that of "dilatation by bougies" or "division by the knife" or both combined. Henry Smith of King's College Hospital, London, is one of the latest and most valuable writers on the surgery of the rectum, and while he points out that stricture of the rectum exists to a much greater extent than is generally supposed, and that its unsuspected existence is frequently the reason why failure occurs in the operation for fistula in ano, he does not allude to any other mode of relief but that of dilatation or division. That division by the knife, followed by dilatation with bougies, may effect a removal of the stricture I admit, but I think such a result is rare, but even in the most cautious and skillful hands it is fraught with peril and is to say the least a formidable operation. Hemorrhage is frequently great and difficult to control and has not unfrequently proved fatal, and in the first case now mentioned it was followed by the formation of an abscess which for three weeks entailed frightful suffering on the patient. When a stricture is not *congenital*, (and in such cases it is generally too high up to be interfered with), it is the result of a local inflammation resulting in the effusion of fibrin into the cellular tissue surrounding the gut, and a knowledge of this fact is sufficient to convince the reflecting surgeon that dilatation alone is incapable of removing it. On the other hand it has been demonstrated, and by none more clearly than by my friend Dr. Emmet of New York, that for the removal by absorption of cicatricial tissue the knife is not to be relied on, the inevitable tendency being to a reunion of the cut-surfaces and the re-establishment of the constriction.

Having practiced with perfect safety and success Holt's operations for stricture of the urethra, and knowing the value of treating atresia vagino by laceration with the hand, I considered myself perfectly justified in adopting the same treatment in stricture of the rectum, and the success attending it is now made public. Undoubtedly many of these cases have a syphilitic history attached to them, but if such precautions as I have indicated are adopted in previously bringing the system into a favorable state for the operation, the syphilitic diathesis will not prevent a successful result, and I may here state that no more effectual method for bringing the system under the influence of mercury in any case can be adopted than that of procuring its absorption through the rectum. I am now convinced that in all cases of long standing stricture of the rectum, dilatation and thinning of the gut *above* the stricture necessarily occurs, and that the proper practice to pursue in such cases is to abstain from all interference with the bowel *after* the operation till it has gained its integrity. It is true Holt advocates the necessity of passing bougies into the urethra at varying periods after his operation, to prevent contraction on healing, and I thought such a precaution necessary in this case of the rectum. I now question whether in *either* case it is necessary, and I believe the main thing to be effected is the *complete rupture of the cicatrix at the time*, nature will do the rest; in other words the absorbents will remove all that is foreign to the part. What is to be particularly noticed is the absence of suffering on the part of the patients subsequent to the operation, and this, combined with what I believe to be its *perfect safety*, will, I trust, recommend it to the consideration of the profession. I may add that I have ordered an instrument to be made on the principle of Holt's dilator which can be used in such cases in future.

"PASO ROBLES HOT SULPHUR SPRINGS,"

(San Luis Obispo County, Cal.)

By E. MALCOLM MORSE. M. D. San Francisco.

The analysis of the water of these springs, made by Professor Thomas Price, and Mr. John Hewston,—proves them to be among the most valuable mineral waters in the United States. This can be seen by comparing the analysis with those of the most celebrated springs in America.

When I say that they are among the *most* valuable springs in America, I would feel some hesitation in making such a positive assertion, did I not know that it can be easily proved, as it is a simple question of qualities and quantities, of well-known medicines. Mineral waters were known, and

highly valued, even as far back as the days of Hippocrates. Pliny speaks of the various mineral waters; and the Roman physicians in the fifth century recommended them for the same diseases for which they are generally used at the present day.

Many of us have seen the beneficial effects of the Virginia Springs, and of the Hot Springs of Arkansas; and we can judge by the analysis of the Paso Robles Springs, of their value.

MINERAL SPRINGS OF PASO ROBLES, CALIFORNIA.

One imperial gallon of water contains (Sulphuretted Hydrogen Gas almost completely saturates the water)—

Free Carbonic Acid Gas	10.50
Sulphate of Lime	3.21
Sulphate of Potassa	.88
Sulphate of Soda	7.85
Peroxide of Iron	.36
Alumina	.22
Silica	.44
Bi-carbonate of Magnesia	.92
Bi-carbonate of Soda	50.74
Chloride of Sodium	27.18
Iodides and Bromides, traces only.	
Organic Matter	1.64
Total solid contents per gallon	93.44

(Temperature 110° F. to 140° F.)

WHITE SULPHUR SPRINGS, VIRGINIA.

Seven pints of this water contains—

Nitrogen Gas	1.013
Oxygen Gas	.108
Carbonic Acid	2.444
Hydro-sulphuric Acid	68
	3.633

50,000 grains of this water contains 115.735-1000 grains of saline matter, consisting of—

Sulphate of Lime	67.168
Sulphate of Magnesia	30.364
Chloride of Magnesium	.859
Carbonate of Lime	6.060
Organic Matter	3.740
Carbonic Acid	4.584
Silicates, (Silica 1.34, Potash .18, Soda .66, Magnesia, and a trace of Oxyd Iron	2.960
	115.735

Temperature 62° F.

THE HOT SPRINGS OF ARKANSAS.

Bi-carbonates of Lime, Magnesia and Iron; Sub-carbonates of Magnesia Iron and Soda; Chloride of Sodium, and Sulphates of Soda and Magnesia in small quantities.

Temperature from 100° F to 148° F.

MINERAL SPRINGS OF EMS, GERMANY.

One pound Troy of water contains:

Carbonate of Soda	8.0625
Carbonate of Lithia	0.0405
Carbonate of Baryta	0.0022
Carbonate of Strontia	0.0080
Carbonate of Lime	0.8555
Carbonate of Magnesia	0.5915
Carb. (proto) of Manganese	0.0028
Carb. (proto) of Iron	0.0120
Sub-phos. of Alumina	0.0014
Sulphate of Potassa	0.4050
Chlor. of Potassium	0.0338
Chlor. of Sodium	5.9255
Fluoride of Calcium	0.0014
Silica	0.3104
Total	16.0525
Carbonic Acid Gas in 100 cubic inches,	51

Temperature 84° F. to 117° F.

PACIFIC CONGRESS SPRINGS, CALIFORNIA.

One gallon of water contains—

Chloride of Sodium	119.159
Sulphate of Soda	12.140
Carbonate of Soda	123.351
Carbonate of Iron	14.030
Carbonate of Lime	17.295
Silica, Alumina, and a trace of Magnesia	49.882
	335.857

Temperature 50° F.

MINERAL SPRINGS OF CARLSBAD, GERMANY

One pound Troy of water contains

Carbonate of Soda	7.2712
Carbonate of Lithia	0.0150
Carbonate of Strontia	0.0055
Carbonate of Lime	1.7775
Carbonate of Magnesia	1 0275
Carb. (proto) of Manganese	0.0048
Carb. (proto) of Iron	0.0208
Sub-phos of Lime	0.0012
Sub-phos. of Alumina	0.0019
Sulphate of Soda	14.9019
Chlor. of Sodium	5.9820
Fluoride of Calcium	0.0184
Silica	0.4329
Total	31.4606
Carbonic Acid Gas in 100 cubic inches	58

(Temperature 122° F. to 165° F.

SWEET SPRINGS, VIRGINIA.

100 cubic inches of this water contains—

Carbonic Acid	37.17
Nitrogen	1.86
Oxygen, a trace.	
Sulphuretted Hydrogen, a trace too small to be measured.	

100 cubic inches of this water also contains—

Sulphate of Lime	5.703
Sulphate of Magnesia	4,067
Sulphate of Soda.	2,746
Carbonate of Lime	13.013
Chloride of Sodium	0.060
Chloride of Magnesium	0.136
Chloride of Calcium	0.065
Peroxide of Iron	0.061
Silica	0.075

Earthy Phosphate, a trace.

Temperature 73° F.

TEPLITZ SPRINGS, BOHEMIA.

Their chief ingredient is the carbonate of Soda in the proportion of about 20 grains to the gallon.

Temperature 84° F. to 120° F.

RED SULPHUR SPRINGS, VIRGINIA.

Seven pints of this water contains:

Silicious earthy matter, containing traces of Oxide of Iron and Alumina	0.70
Sulphate of Soda	3.55
Sulphate of Lime	0.47
Carbonate of Lime	4.50
Carbonate of Magnesia	4.13
A peculiar substance, containing Sulphur combined with organic matter	7.20
	20.55

An imperial gallon of this water contains, cubic inches—

Sulphuretted Hydrogen	4.54
Carbonic Acid	8.75
Nitrogen	4.25

Temperature 54° F.

SARATOGA CONGRESS SPRINGS, NEW YORK.

One gallon of water contains—

Chloride of Sodium	385.0
Hydriodate of Soda	3.5
Carbonate of Soda.	
Bi-carbonate of Soda	8.982
Carbonate of Magnesia.	
Bi-carbonate of Magnesia	95,788
Carbonate of Lime	98,098
Carbonate of Iron	5,075
Silica	1.5
Hydro-bromate of Potassa, a trace.	
	597.940
Carbonic Acid.....cubic inches,	311
Atmospheric Air... " "	7
	318

Temperature 50° F.

THE UNSPRUNG SPRING, BADEN-BADEN.

Its water contains 184 grains of saline matter to the gallon, 128 grains of which is Chloride of Sodium.

Temperature, 154° F.

In comparing the waters of the Paso Robles Hot Springs, with the justly celebrated Carlsbad Waters,—probably the most valuable medicinal springs in Europe,—we notice first that these California Springs are saturated with sulphuretted hydrogen gas, while the Carlsbad Springs contain no sulphuretted hydrogen gas. The most efficient agent in the German Springs above mentioned, is carbonate of soda. The Paso Robles Springs contain the very remarkable quantity of bi-carbonate of soda, 50.74 grains. Dr. Hughes Bennett of Edinburgh, in his late and valuable work, recommends the bi-carbonate of soda freely in rheumatic diseases. And Dr. Austin Flint, in his late work on the "Practice of Medicine," (speaking of rheumatism), says, "Of late years the practitioners of this country have generally adopted the alkaline treatment, advocated especially by Fuller, whose valuable work has already been repeatedly referred to. The bi-carbonate of potassa, the *bi-carbonate of soda*, and the tartrate of potassa and soda, are the remedies usually relied on." The analysis of the Paso Robles waters shows them to contain about as much bi-carbonate of soda as the Carlsbad Springs contain of the carbonate of soda. When the ablest medical writers in the United States place this medicine at the head of the remedies for rheumatism, we have a right to consider it an important ingredient. The Carlsbad Springs contain more chloride of sodium, (common salt), and a great deal more sulphate of soda; but no sulphate of potassa; no alum;—while the Paso Robles Springs contain *both* of these medicinal agents, and more iron than the German Springs. For the exact quantities I refer the reader to the analytical tables, where he can make the comparison himself. The temperature of the waters of the different springs at Carlsbad, range from 122° to 165° F. and from 60° to 140° F. at Paso Robles; three of them being over 110° F. This is about as high a temperature as a person can generally bear; all heat over that degree is superfluous, and the waters have to be cooled down to about that point before bathing.

A glance at the analysis of the waters of Ems, will speak for itself. These springs, like those of Carlsbad, contain no sulphuretted hydrogen, and are not so hot as those of Paso Robles.

The Unsprung is the most important spring at Baden-Baden. I have not been able to get an analysis of it, but find a foot-note in Dr. Moorman's work, which informs his readers that it contains 128 grains of common salt, and only 56 grains of other saline matter, to the gallon. The celebrated Teplitz Springs in Bohemia, Dr. Moorman says, range in temperature from 84° to 120° F. Their chief ingredient is the carbonate of soda, in the proportion of about 20 grains to the gallon. I am sorry that I have not the analysis of the most celebrated Mineral Springs in England and France; but it is generally conceded that the German Waters are among the most valuable springs in Europe. The White Sulphur Springs in Virginia, contain in large quantities sulphate of lime and sulphate of magnesia, but have only a trace of iron; no carbonate or bi-carbonate of soda,—no alum,—no chloride of sodium,—and only a very small quantity of sulphuretted hydrogen gas. They have about the same quantity of free carbonic acid gas as the Paso Robles Springs. The temperature of the White Sulphur Springs is 62° F.

The temperature of the Paso Robles waters, vary in its different hot springs from 110° to 140° F., but the medicinal agents which these springs contain would be *valuable* even if their temperature was that of ordinary water. The waters of the Hot Springs of Virginia have been analyzed by Professor William B. Rogers. They

contain 12.778 grains of saline ingredients in 100 cubic inches of water; more than half of which is carbonate of lime. "The free gas consists of nitrogen, oxygen, and carbonic acid. It also contains a mere trace of sulphuretted hydrogen." The temperature of these hot spring baths is from 100° to 106° F. The Hot Springs of Arkansas rank deservedly among the most effectual medicinal springs in the world; though they are not so well known to the public as they should be. Their temperature ranges from 100° to 148° F. They are valuable not only on account of their high degree of temperature; but because, unlike most very hot springs, they contain very valuable medicinal ingredients. Dr. Moorman, who is resident physician at the White Sulphur Springs, Virginia, says,—"These waters are the best representatives we have in the Atlantic States of the European waters of Baden-Baden, Wisbaden, Carlsbad, and Teplitz." They have been analyzed by Dr. David D. Owen, Geologist of Arkansas; also by E. P. Core; and were found to contain carbonate of lime, silicate of magnesia, and a trace of iron.

I am sorry that the analysis which I give of the Pacific Congress Springs is the only one I have been able to obtain of California Springs; but I hope the proprietors of the various springs in our State will have them analyzed by prominent analytical chemists, and the results published.

The analysis of the European springs, I have copied from Fowler's chemistry; and that of the different American springs in the Atlantic States, I have taken from Dr. Moorman's work on the "Mineral Springs of the United States and Canada."

I have written positively about the value of the Paso Robles Mineral Springs; and believe that time will show I have not overrated them. The diseases for which these waters have proved beneficial are, Rheumatism, Gout, Neuralgia, Paralysis, Erysipelas, Intermittent Fever, a large class of skin diseases,—mercurial and syphilitic diseases, and diseases of the liver and kidneys,—persons suffering with consumption, cancer or organic disease of the heart, had much better not try these waters, as they are decidedly injurious in these diseases.

After watching the effects of these Paso Robles Hot Sulphur Springs for several months cautiously, and at first skeptically, I have noticed the following results. They have an alterative effect; they are generally laxative in their action; and are remarkably *diuretic* at first—so much so that many patients will not drink the waters before retiring to bed on account of the inconvenience of being compelled to get up several times during the night. In cases of young children I have frequently seen it act on their kidneys in from *two* to *five minutes*. The waters also act indirectly as a *tonic*. There have been chronic rheumatic cases here, who had tried the waters of Carlsbad, the Virginia Springs, and those of Arkansas, and who affirm that these Waters of Paso Robles are the most beneficial mineral waters they ever drank.

Patients who continue the use of alcoholic stimulants, derive little benefit from the use of the waters. I would recommend invalids to be careful about their diet. The more simple their food is, the more easily can the stomach digest it. I have noticed many patients here eating pies, jellies, cakes, pickles, hot rolls, raisins, walnuts, salad dressing, etc. This is all very wrong, and seriously retards their recovery. *Diet* is one-half the battle in fighting with disease; by *diet* I do not mean starving; I mean *suitable food, in quality and quantity to each case.*

Patients suffering with rheumatism especially, should avoid eating much *sugar*. Alcoholic drinks are more than usually poisonous in these cases. Persons coming to the Paso Robles Springs should bring a pair of blankets with them; for after coming out of a hot bath of 110° to 112° by wrapping themselves in blankets and lying down on the bedstead in the plunge bath-room;—a most profuse perspiration takes place. Patients here should eat a hearty breakfast and dinner, but nothing but coffee or tea and brown bread, for supper. They should have a regular and early hour for retiring to bed, and for rising; and should take *regular exercise*, even if they can take but little at a time. However, there is little use in urging our Americans to *diet* themselves; nearly all of them would rather risk death and protracted disease than put any restraint upon their appetites. They generally diet themselves when they become too sick to eat.

In very obstinate cases of rheumatism, bi-carbonate of soda should be taken in connection with the waters; it would wonderfully accelerate recovery. It is a simple and safe remedy; a patient could bring down his phial of it and take it himself. In some obstinate cases of secondary syphilis, small quantities of iodide of potassium would probably hasten the cure; and two grains of quinine taken twice a day, in neuralgia, would not interfere with, and would possibly hasten the recovery. Nearly all the patients here now who have tried these Paso Robles Springs, have not taken any medicine while using the waters, nor do they seem to require any medical assistance, unless in exceptional cases. But these simple and safe remedies which I recommend, would be worth trying, for if they do not hasten the cure, they certainly will not retard it.

The atmosphere at the Paso Robles Hot Springs is pure, and free from miasmatic poison. I have not seen a case of intermittent fever since I have been here. Persons afflicted with severe rheumatic or syphilitic diseases of many years standing, should take these waters for twelve weeks. Many persons begin to improve in two weeks. The odor of the sulphuretted hydrogen gas is very strong about the Springs, and if the wind is in the right direction, a person can notice it a quarter of a mile off, but after staying here a little while it is hardly noticed. The waters at first are very disagreeable to the taste, but in a short time patients prefer it to any other. On account of the large quantities of the gases it contains, it produces a very pleasant and stimulating effect on the stomach, and is beneficial in many cases of dyspepsia. The main spring near the hotel is hot, beautifully clear, full of gas bubbles that make it look as if it were going to boil; it discharges about a hundred thousand gallons in twenty-four hours. New cottages are rapidly building, and it is doubtful whether they will be sufficient to accomodate the invalids who are coming here every day. These springs were used and highly thought of by the old mission priests eighty years ago; and we are told that when any of them were sick in this neighborhood, they were brought here. They were also known to the Indians; and the native Mexicans place great confidence in the healing qualities of their waters.

Patients convalescing from rheumatism, syphilis or gout, would be most undoubtedly benefitted by a month's residence at these Springs, and it would not only hasten their recovery but would also render their cure more permanent. The analysis of these waters has been carefully made by two reliable anylitical chemists. Their names are a guarantee to the public of its correctness.. Mr. John Hewston and Professor Thomas Price, are too well known to most of our profession to need any encomium from me.

HOSPITAL CASES.

Operations in the City and County Hospital, by F. A. HOLMAN, M. D., Visiting Surgeon.—Reported by W. F. McNUTT, M. D., M. R. C. S. E. Etc.

CASE 1. LIGATION OF THE FEMORAL FOR POPLITEAL ANEURISM.

May 15th, 1869, W. B., aet. 40, Swede; strong, muscular looking man, always enjoyed good health previous to the present trouble. Says that about four weeks ago, he commenced to have pain in the popliteal region, especially when he attempted to stretch out his leg. In examination of the painful part, discovered a small tumor, not as large as a walnut. The tumor grew so rapidly, and the pain so severe and constant, that he was obliged to quit work and come into hospital for treatment.

CONDITION BEFORE OPERATION.

Tumor quite as large, or perhaps larger than a turkey's egg —pulsation distinct, also characteristic thrill and bellows sound—glossy appearance, and pits slightly on pressure—the seat of constant pain, more or less severe—leg and foot considerably swollen and leg somewhat bent.

Flexion of the leg on the thigh was tried several times, but had to be abandoned on account of the severe pain which it caused; patient unable to endure it more than an hour or so each time.

OPERATION.

The femoral was tied in the Hunterian canal. I was not present at the operation, which was performed without much difficulty. In passing the needle round the artery some arterial blood flowed, which Dr. Holman attributed to the rupture of a small branch, and not from the rupture of the walls of the femoral; he however, withdrew the needle, opened the sheath higher up and ligated. The arterial blood immediately ceased, as well as the pulsation in the tumor. The impossibility of keeping the leg flexed in this case seemed to rise from the tumor being lower in the popliteal space than popliteal aneurisms generally are. Compression was not tried.

June 10th. There is still some discharge of pus from the wound which has however almost ceased since the ligature came away; the tumor is reduced in size; the swelling of the leg decreased, and its natural warmth, which has been kept up artificially, restored.

CASE 2. EPITHELIAL CANCER OF LIP.—SECOND OPERATION.

Thos. R. æt. 35, born Ireland. About six weeks ago Dr. Holman removed quite a large epithelial cancer from the lower lip, right side of the medium line, which the patient says made its appearance about one year previous. Two weeks ago at the bottom of the cicatrix, or what was the apex of the wound, a small tumor could be felt, which at time of second operation was about the size of a cherry. It was removed by an eliptical incision, removing tissue to the extent of about one inch long by half an inch broad.

CASE 3.—FRACTURE INTO THE ANKLE JOINT—AMPUTATION.

Isaac W., aet. 40, colored, had both ankles fractured by earth slide, October, 1868. I saw the patient at the time, with Dr. Provost. There was a compound fracture of the left fibula above the malleolus, at what is sometimes called the neck of the bone, and was the result of direct violence. In as much as the fracture was caused by direct violence, and there being no dislocation of the foot or rupture of the deltoid ligament, or comminution of the bone, or any severe sprain of the joint, very little contusion of the parts, tibia not fractured, fracture of the right simple, and the man apparently healthy, we concluded that amputation was not justifiable.

On examination of the right side we found simple oblique fracture of the internal malleolus, due to indirect violence. The detached bone could be moved with the thumb and finger; while the foot was kept straight or a little abducted, there was no displacement, but rotate it a little inwards and the displacement became considerable; We put up both legs in temporary fixtures and sent him to hospital. On his arrival there, Dr. Holman also thought it was conservative surgery to try and save the left leg. There was no question of the propriety of trying to save the right one.

Proper appliances were made to each leg and the patient put on good diet. And tonics and stimulants given freely, when the left ankle commenced suppurating. The suppuration was profuse, and notwithstanding the constitutional treatment and the local dressing of carbolic acid, amputation was resorted to in January, 1869, about which time it was evident that the right ankle would suppurate, which it did profusely and had also to be amputated, May 22d, 1869.

There is no doubt that, had the left ankle been amputated at the time of the accident, the right one would have been saved. For two months the right ankle went on well, and the detached piece was nearly united, when the suppuration of the left so exhausted the patient that the right ceased uniting and finally commenced suppurating.

CORRESPONDENCE.

Philadelphia, June 10th, 1869.

Mr. Editor:

The most active of all our Medical Societies here are the Pathological, the Biological and Microscopical Department of the Academy of Natural Sciences, and the College of Physicians.

The Pathological Society has very rarely less than thirty or forty members present, and the number of specimens presented is so great that they often crowd each other. Our mode of working is as follows: Immediately after the minutes are read, specimens are presented, invariably (as a rule of the Society requires) with a written history; this being read, the presenter of the specimen draws attention to the pathological appearances in detail, and discusses any questions relating to the case which deserve attention. The members then gather around the table, examine the specimen for themselves, and having retired to their seats a discussion follows. This discussion is noted in brief by the Recorder and is published in the "Proceedings" in the *Amer. Journal of Med. Sciences.* Among the very interesting specimens lately presented were the following: four instruments for examining tumors, muscular tissue, etc., during life, to determine their constitution microscopically, the question of fatty and fibrous degenerations, the presence of trichinæ, etc. Exactness of diagnosis cannot be secured at the present day without such means. Another was a case of Encephaloid of the thigh, where amputation at the hip joint was performed at the Philadelphia Hospital (Almshouse) by Dr. Maury. One very curious circumstance was noted here; the veins, especially the femoral and internal saphenous were filled with clots, (their walls being perfect) which, while at the central end consisting of blood corpuscles and fibrin, in the rest of its mass was wholly analogous to the tumor outside. The possibility of the metastasis of the

disease to the lungs by direct transference of broken off particles, forming pulmonary emboli, is in such cases of unusual interest. The only similar instances I know of are reported by Felz, (*Etude clinique et experimentale des embolico capillaires,* Paris, 1868, pp 18–21 and plate I. Figs. 1 and 2.) where a cancer of the thyroid gland projected a similar mass into the internal jugular vein (to which it found access through the inferior thyroid vein) and in the lungs were numerous carcinomatous foci which were all found to take origin from small emboli broken off from the venous mass and adherent to the capillaries in whose calibre they had become impacted. Various attacks of dyspnœa had occurred (probably) at the times when these fragments had interrupted the respiration. Immediately afterward is quoted a similar case of Weber of Heidelberg (Gaz. Hebdom. 1866, p 638) in which from a similar soft cartilaginous clot in the internal iliac vein, similar emboli were produced in the lungs and liver, followed in some cases by abcesses and in others by organization and growth of the neoplasm.

This question in the present case is still *sub judice,* as the patient is happily yet living.

Your readers could not do a better service to Pathology than to publish any similar cases, for I know of no others.

Very truly yours, K.

Boston, Mass., June, 1869.

Editor of the California Medical Gazette:

In the present communication, I propose to note a few items of interest derived from cases in the wards of the City Hospital, as well as any general medical intelligence that may come to mind.

The carbolic acid treatment of the external wound in cases of compound fracture—fractures of this class being by far the most numerous—has been quite extensively tried in the City Hospital for a year past, and in most of the cases thus treated, with the most gratifying results. I have no full record of the cases, but from pretty constant personal observation in the wards, know that the greater number of them have recovered with scarcely any, or no suppuration or constitutional symptoms whatever, and in very little longer time than that ordinarily occupied in the treatment of simple fractures.

The value of carbolic acid in the treatment of compound fractures, can, I think, be hardly over-estimated. At present, however, it seems that these, together with other cases in which it is desirable to stay the further admission of air to wounds, and prevent suppuration, are the only ones in which this remedy is in any way of very material service.

The *carbolic oil,* so called, was the preparation used in the above mentioned cases; one part of saturated aqueous solution of the acid, to three, four or five parts of linseed or castor oil.

Some twelve resections of the hip joint for disease, have now been performed in the same hospital. The results at present are as follows: four discharged cured, and now walking about with useful limbs; five still under treatment with good prospect of a favorable result in every case, and three dead. These results are all most satisfactory, considering the character of the cases, two of those which died being adults—children seem to do much better than older persons —and otherwise very unpromising subjects. Most of the other patients were very much younger, and although most of them were very much emaciated and exhausted, and the disease of the joint very far advanced, after the operation there was immediate and marked improvement in the general health.

Dr. Cheever who has operated on a larger number of cases than any other surgeon here, prepared the semi-circular flap method, and after the operation turns the flap back and secures it in that position by means of an adhesive plaster, thus leaving the wound thoroughly open, and exposed to the air; the return of the flap to its former position, and the closure of the wound at any time previous to its complete filling up with granulations, being sure to be followed by constitutional symptoms necessitating its re-opening.

The great drawback in the treatment of these cases is, that they are not brought to the hospital for operation, until it becomes a *dernier resort.* In children operated upon at a sufficiently early period of the disease, as soon as it has become evident that there is erosion of the articulating cartilages, and before abscesses have formed, and the general health has become deteriorated, it seems, judging from the course of the above cases, as if the results would be eminently satisfactory.

In the majority of the cases occurring among the children of the poorer classes, in which the disease has advanced beyond the *first stage,* early operations seemed to be indicated, for in these cases the disease is left to itself, or subjected to the best treatment, independent of operation, possible under the circumstances, is almost sure to go on from bad to worse, and eventuate in a useless limb or death. Among the better classes, where a child suffering from incipient, or even somewhat more advanced hip disease, can be subjected to good hygienic influences, and kept in bed, with a weight applied to the affected limb, for several months, there will be a good chance for recovery without operative procedure; but such a course is impossible among the lower classes; and treatment of this kind in general hospitals is not only infeasible, but for obvious reasons would scarcely ever be successful.

There is also in the City Hospital a case of reproduction of the tibia. The patient, a girl thirteen years of age, had necrosis following scarlet fever. Dr. Cheever removed the entire shaft of the tibia—sawing it through just below the line of junction of the superior epiphysis—together with the inferior epiphysis, the disease having penetrated the ankle joint. The necrosed shaft was partially surrounded by thickened periosteum, which has reproduced the tibia perfectly, and she now has a good leg slightly shortened from partial dislocation of the upper end of the fibula upwards, a complication which is said to always occur in cases of resection of the tibia. The case is a remarkable success of conservative surgery, and reflects great credit upon the skill of the attending surgeon.

Two other similar cases have since been operated upon in the same hospital, each of which promises a like favorable result.

There seems to have been quite a large increase in the number of cases of hereditary syphilis in this city since the close of the late war, as compared with previous years. I cannot at present give the results of the observations of other gentlemen in this regard, but my own experience at the Dispensary leads me to believe that this class of cases is much more numerous than formerly. Before the war, and even down to 1865, these cases were not by any means common among dispensary patients. During my term of service in the children's room in the months of January, February and March, 1866, I saw but three cases of syphilitic disease in infants. During the same term in 1867, five cases. In

the same term 1868, over thirty cases, and as many more during corresponding months of the present year. The state of this disease would correspond to the time at which men who had served in the army and married subsequent to to their discharge at the close of the war, would naturally have their first children born to them. Perhaps it may be said, that providing my supposition be correct, the increase in these cases should have commenced before it really did; but abortions in the first pregnancies after the contraction of syphilis by either the father or the mother are so common, that very few syphilitic infants from the families of men of the class referred to, or those born since the close of the war to men married previous to their seeing service, would probably be seen before 1868.

Perhaps this increase of hereditary syphilis is not wholly chargeable directly to army life, for the conditions of social life amongst the classes from which these cases come, are such as might well lead us to suppose that the fathers are not the only culprits in this matter.

Dr. Calvin G. Page, of this city, probably known to many of your readers during his sojourn in California on account of ill health a year or two since, died a few days ago of the effects of malarial disease contracted while he was in the military service at the South, during the late war. The immediate cause of his death, was rupture of the gall bladder Dr. Page was a gentlemen of marked ability, high social attainments, and thoroughly established in his profession.

J. B. T.

REPORTS OF SOCIETIES.

EDINBURGH COMMITTEE ON THE ACTION OF MERCURY.

The British Medical Journal for May 8th, 1869, gives the report of the Edinburgh Committee on the action of mercury, podophylline and taraxacum on the biliary secretion, by John Hughes Bennett, M. D. F. R. S. E., convener and reporter. We copy:

"The number of this Journal for July, 1868, contains the first part of this report, which was altogether historical. The concluding part, containing the researches of the Committee, is now given. With a view of completing the subject, additional investigations have been made as to the action of podophylline and of taraxacum on the liver. The whole inquiry occupied two years, and, so far as the Committee believe, is quite exhaustive, and leaves nothing to be desired."

We have not space for the full report, as it occupies nineteen columns of the Journal, and gives a detailed description of the mode for operating for biliary fistulæ, and of collecting the bile, practiced by the Committee, most of which we will omit; also their observations to determine how far animals are subject to the action of mercury. The report of their observations with pilula hydrargyri and calomel, occupy five columns, which we will omit, and simply give the result of their observations on the cholagogue action of pilula hydrargyri and calomel, as follows:

"1. Pilula hydrargyri, when given in doses which did not produce purgation, caused no increase of the biliary secretion.

2. Pilula hydrargyri, when given in doses which produce purgation, diminished the biliary secretion.

3. Calomel, given in doses of one-twelfth of a grain, from six to fourteen times a day, and in doses of two grains, from two to six times a day, did not produce purgation or increase the biliary secretion.

4. Calomel, when given in doses which produced purgation, diminished the biliary secretion."

The Committee also made observations on the cholagogue action of corrosive sublimate, and reported as follows:

"1. That corrosive sublimate, when given in small doses, gradually increased, does not augment the biliary secretion, but that it diminishes it the moment the dose reaches a strength sufficient to deteriorate the general health.

2. That corrosive sublimate given in the above method may diminish the biliary secretion, while it does or does not produce an evident action on the salivary glands and mouth, and without producing purgation.

3. Case 6 shows that the biliary secretion is likewise diminished when this drug is given in a dose sufficient to produce purgation."

The Committee sum up the following conclusions regarding the cholagogue action of mercury, viz:

"The foregoing observations seem to us clearly to show that blue pill, calomel, and corrosive sublimate, when given to dogs, in either, small, gradually augmented or in large doses, do not increase the biliary secretion; they do not even influence it, so long as neither purgation nor impairment of health are produced, but they diminish it as soon as they produce either or both. It may be urged that, although we have proved this regarding dogs, it does not follow that on man these drugs will have the same action. It must be admitted that some animals are altogether insensible to remedies which produce powerful effects on others; that different doses are often requisite to occasion similar results; and that there may be peculiarities so very decided as to render it impossible to infer what will be the action of a remedy upon one animal from its influence upon another. But have we any reason to conclude that in the present instance there exists such difference in the action of mercury as to prevent any inference being drawn from the dog regarding man? All the facts with which we are acquainted show that it is legitimate to infer that the action of mercury ought to be regarded as similar in both cases. We have demonstrated that, as regards its action upon the salivary glands, mouth, intestine, appetite, and general nutrition, the influence of mercury is the same. We therefore infer that it is in the highest degree probable that its action on the hepatic secretion will also be the same. The only difference that there seems to be between the dog and man as regards the action of mercury, consists in the fact that in the dog larger doses are generally required to produce the same effects as those observed in man. But even here it may be argued that more marked results are required to satisfy the observer, and hence the greater dose necessary. These circumstances, therefore, cannot be held as affecting the conclusion at which we have arrived.

We have not deemed it worth our while to experiment upon any other animal, for we are unable to see how such experiments could materially strengthen our position. Even though we had shown that mercury, when given to a rabbit, cat, pig, donkey, or horse, diminishes the biliary secretion, it might still be said that this does not apply to man. But

there are several special reasons which render experiments on these animals either impracticable or less reliable than those on the dog. Bidder and Schmidt failed to establish biliary fistulæ in cats; we therefore thought it not worth our while to spend money and time in making the attempt. Horses and donkeys are too unwieldy for the purpose, and have no gall-bladders, a peculiarity which in all probability would render it impossible to establish biliary fistulæ in them. In pigs, the hepatic secretion differs from that of man, in as much as it contains hyochloic acid, and, according to Strecker, no sulphur. It might, therefore, not unfairly be objected to any inferences from experiments on pigs, that, inasmuch as the porcine differs from the human hepatic secretion, it could not be held as altogether probable that mercury would influence both in the same way. Everything seems to show that the animals used by the Committee are those best suited for the observations they have made. In addition to the therapeutical facts previously mentioned, which, after all, are the most important, there are these, that the qualitative composition of canine is the same as that of human bile, and that the dog, like man, can be fed on flesh, vegetable, or mixed diet. In this respect dogs are superior to most other animals, even to the Quadrumana, which, though in conformation most resembling man, are vegetable feeders. So far, therefore, as direct experiment and exact observations are capable of determining the influence of mercury upon the biliary secretion, the Committtee have no doubt that the dog is superior to the animals above mentioned.

But it may be supposed that mercurials possess some specific power of exciting the biliary secretion by acting on the orifice of the common bile-duct, and so stimulating the secretion through the nerves which connect it with the liver, just as pyrethrum and vinegar stimulate the salivary glands when they are applied to the orifices of the salivary ducts. It might also be objected that, inasmuch as in our experiments the common bile-duct had been divided, the nerves alluded to might have been so injured that stimulation of the orifice of the common bile-duct could no longer excite the secretion. It remains to be shown, however, that mercurials do specially excite the orifice of the bile-duct. It is not probable, at any rate, that their influence on the biliary secretion was, in the cases of dogs, 6, 7, and 8, prevented by division of hepatic nerves. In these experiments the common bile-duct was simply divided with as little injury to neighboring parts as possible (in previous experiments a portion of the bile-duct was removed), and these animals did not suffer in the least from the shock after the operation; so that nervous injury could not have been extensive. Moreover, in the case of dog 7, the parts around the common bile-duct were dissected after death, and the nerves proceeding from the solar plexus to the liver were found at some distance from the duct, and had apparently suffered no injury at the place it had been divided. The Committee, therefore, do not attach any value to this objection.

But some may say that, although we have proved that mercury diminishes the biliary secretion in dogs, and that in man its action will in all probability be the same, yet our experiments have been performed on animals in a state of health; and that, had they been made on dogs with diseases such as those in which mercury has been *supposed* to increase the hepatic secretion, it would possibly, in the case of such dogs, have been increased. With such an hypothesis we need not seriously occupy ourselves until the objectors prove that, in any case whatever, mercury can increase the biliary secretion in man.

We have been unable to discover any facts brought to light in this or any other age which prove that mercury stimulates the biliary secretion. So far as we can make out, the notion that it does so originates in some vague statement made by Paracelsus, or the authors of his time, as to the good effects of mercury in what he has called 'icteritia.' But we repeat, not only do we not know how such a notion has arisen, but we are ignorant how to make direct observations on the subject in man. We have already stated that such observations are, in the present state of physiological chemistry, impossible. We do not deny the possibility of mercury being useful in some diseases of the liver. We simply say that the notion of its doing good by increasing the biliary secretion is untenable."

After making a like careful observation on the action of Podophylline and Taraxacum, they concluded that:

"1. Doses of podophylline, varying from 2 to 8 grains, when given to dogs, diminished the solid constituents of the bile, whether they produce purgation or not.

2. Doses which produced purgation lessened both the fluid and solid constituents.

3. During an attack of dysentery, both the fluid and solid constituents of the bile were greatly lowered.

4. Doses of the solid extract of taraxacum, varying from 60 to 240 grains effected neither the biliary secretion, the bowels, nor the general health of the animal."

CINCINNATI ACADEMY OF MEDICINE.

Among many valuable papers read at a late meeting of this Society, we extract the following:—

A Case of Labor, with Variola, etc. read by the Secretary, from Dr. Elstun.

Columbia, O. April 10th, 1869.

I attended a lady in her first labor on March 14th, the labor occurring during an attack of varioloid. The woman having been taken sick on the Tuesday previous the disease was at its height, the pulses being fully developed and would be considered a bad case of Varioloid, the pustules being large and well filled all over the body, even to the palms of the hands and soles of the feet. The labor was probably brought on some ten days or two weeks too soon by the occurrence of the varioloid, which rendered the labor somewhat tedious, it lasting about eighteen hours.

The child appeared strong and healthy, and on the following morning I vaccinated it on the inside of both legs, believing it would be more likely to take, and be less liable to be rubbed off in that place than on the arms. The child was left to the care of the mother, nursed from her breasts and slept in the bed with her. The vaccination took nicely by the fifth day and the child is now well at four weeks and has not had varioloid.

The husband of the lady took varioloid on the tenth day after her confinement and has fully recovered. Another incident connected with this is worthy of note, that this child when born, was found to have a tooth in its proper position about the middle of the lower jaw, set loosely in the gum, which in a few days the mother found very irritating to the nipples, so I removed it, (and send you the specimen enclosed.)

The mother has recovered about as rapidly from her

varioloid and confinement as she could have been expected to recover from either by itself.

I might add that the sister of this lady was in attendance as nurse, was re-vaccinated and had quite a sore arm, though she showed a very perfect scar from a former vaccination, and did not contract the disease.—*Cin. Lancet and Observer.*

MISSOURI STATE MEDICAL ASSOCIATION.

At the annual meeting of this Association for 1869, at St. Louis, May 27th, the subject of Medical Education came up for debate, when Dr. Hurt, Member of the Legislature, being called on, stated that had introduced a bill which had been referred to the Committee on Education, the Chairman of which had been authorized to report favorably upon it, providing for the appointment by the Governor of a Board of Examiners, embracing no one connected with any medical school or college, before whom all persons shall pass a satisfactory examination before being allowed to practice medicine in this State; all persons violating the same being liable to a fine of $1000—physicians practicing at the time to be exempt from its provisions. The bill, he said, was not made retro-active, for the reason that it was estimated that the irregular practitioners—advertising quacks—now so engaged, were paying to the press in the State not less than $30,000 annually, and were this interfered with, the press would oppose the bill. The Legislature had adjourned before the bill was reached, but it would come up at the next session. One object of the bill, he said, was to prevent a further influx of physicians.

Dr. McPheeters thought that instead of by the Governor, the Board of Examiners should be appointed by the State Medical Association. If appointed by the Governor, the Board might be made a political machine; if by the Association a more competent Board would be secured.

Dr. Hurt thought an amendment to that effect might yet be incorporated in the bill.

Dr. M. A. Pallen had formerly favored legislative interference but was satisfied that it would do no good. Protection from quackery must come through medical schools. The more quackery is abused the more it thrives. Legislation cannot purge the profession of incompetent practitioners. We must raise the standard of medical education. The schools must be made to desist from sending out men incompetent to practice what they profess. It was lamentable to see the number who "graduate" every spring, and hang out their shingles as "doctors" who are utterly incompetent to practice.

Drs. Barker and Lemoine coincided with Dr. Pallen's views. The latter was glad to see him "advance backwards" in his opposition to legislative interference, and hoped Dr. Hurt would either withdraw his bill, or "kill it by committee."

Dr. Whitehill thought legislation was to some extent necessary. A knowledge of anatomy was essential. In some States the procurement of subjects for dissection was facilitated by legislative enactment; in this it was made a criminal offence, and yet the practitioner was liable, daily, to prosecution for mal-practice—for a lack of the knowledge that can in no other manner be acquired. If the United States Government found it necessary for the protection of the lives and health of its soldiery and sailors, to appoint boards of examiners to enquire into the qualifications of physicians, regardless of their being the possessors of diplomas, citizens—women and children—were entitled to no less protection. While it was true that the profession themselves were largely and perhaps mainly at fault for the evils complained of, nevertheless judicious legislation could greatly facilitate their redress.

Dr. Bauer, recently of New York, hoped for but little from legislative enactments. In Europe, where the government had the power to enforce them, they might do, but with us, in the States in which it had been tried, legislation usually produced an unfavorable reaction against the profession. The press, interested in the success of quackery, through its liberal advertisements, denounces such enactments as unjust and oppressive—the fruit of envy of the success of our more fortunate medical "brethren" (?), and public opinion sympathising with the "oppressed" (?), they become inoperative. Protection must come through a reform in the system of medical education, and this must come through the schools and the profession themselves. In this connection, he contrasted the curriculum of study in this country with that required in European schools, arguing that with us it is too limited and the time devoted to study too short. Unfortunately the competition in our schools seemed to be to secure numbers of students rather than efficiency. We must insist on a more efficient system of education. In the same ratio as the profession elevates itself above pretenders, by solid acquirements and practical efficiency, in like ratio public opinion will sustain and encourage us.

Dr. J. M. Scott thought unjust reflections were cast upon the faculties of the medical schools, and spoke warmly in their defence.

Dr. J. B. Johnson was convinced, from what he had read in the Journals and learned from other sources, that the legislative enactments to raise the standard of medical knowledge and usefulness would be unavailing and even injurious. The work must be done by the profession themselves. Medical men must unite in elevating and perfecting medical education. As an American he was an advocate for American education, and a defender of American institutions, in which the child of humblest parentage might rise to the highest rank; and referred, with pride, to distinguished statesmen, jurists, and members of our own profession, whose names, as Americans, were revered, alike at home and abroad. It was true, he said, our institutions, which were yet comparatively in their infancy, were not equal to those of Europe, but he believed the time would come when they would not only be their equal, but superior.—*Med. Archives.*

TRACHEOTOMY IN SYPHILITIC LESIONS OF THE AIR-PASSAGES.

M. Trélat read at the last meeting of the Académie de Médecin, a paper on this subject, of which the following are the conclusions: 1. Syphilitic lesions of the air-passages necessitating tracheotomy may arise at any stage of the disease, but are of most frequent occurrence during the tertiary period. Their nature, seat, and extent vary, but yet they are of most common occurrence the nearer they are to the upper orifice of the larynx. 2. The obstruction they give rise to may arise suddenly, but it is generally more gradual, and supplies an element of diagnosis. 3. An attentive study of the signs and symptoms characterizing obstruction of the larynx and of the trachea, prove that it is possible to distinguish these two orders of lesions which it is of such importance to recognize with regard to prognosis and therapeutics. 4. The diagnosis is based upon the loss or preservation of the voice, on the epoch of the appearance of the dyspnœa, and on laryngoscopic examination. 5. Excellent

results have followed upon tracheotomy in laryngeal obstructions, while to the present time it has only been attended by failure in trachael obstructions. 6. When the operation is indicated, it should be executed without delay, as death may result from the occurrence of a sudden suffocative paroxysm. 7. Although tracheotomy offers so few chances of success in contractions of the trachea, it should nevertheless be tried, after a diagnosis which may have to be rendered more accurate and precise during the course of the operation. 8. The operation requires to be modified according to the nature of the lesions, and success is only to be hoped for when the obstruction can be passed and dilated by means of a suitable canula. In the contrary case failure is certain. 9. When tracheotomy is followed by a cure, the period during which the canula has to be retained, varies according to the nature of the lesions. The medical treatment must be resumed as soon after the operation as possible, and carefully persisted in. The employment of M. Broca's canula (its opening limited to inspiration) enables us exactly to determine the epoch at which the canula may be removed and the wound healed without incurring any danger.—*Medical Times and Gazette,* Dec. 19, 1868.

ST. LOUIS MEDICAL SOCIETY.

Extracts from the Proceedings of the Society, reported for the Medical Archives, by J. C. WHITEHILL, M. D., Secretary.

OSTEOID MALIGNANT TUMOR.

Dr. Edgar presented for inspection a specimen of osteoid malignant tumor, about four inches in diameter, which, in the tunic with the testicle and epididymus (both of which were firmly compressed by, but not involved in it) he had removed from a patient, a farmer, aged about 50 years, who previous to the appearance of the tumor had enjoyed uniform good health. When first observed, the tumor was about the size of a hickory nut, seemed loosely attached to the posterior surface of the testicle, and was not painful. Eighteen months later, when he consulted the doctor (about two years ago) the tumor was about two inches in diameter, round, smooth, and slightly elastic, feeling somewhat like a hard rubber ball; the weight caused a dragging sensation, with occasional pain running from the testicle up the cord through the pelvis. Excision was recommended, but the patient declined. A year later, he again presented himself, much emaciated, his general health impaired, and the pain and dragging sensation no longer tolerable. Upon consultation, its removal was advised and performed. Five months later, a small *soft tumor* was noticed in the scrotum, which rapidly enlarged, attended with sharp pains through the pelvis and lumbar regions. Like tumors soon appeared in other portions of the body, and the patient succumbed.

The specimen, he said, was one of osteoid cancer, located in adipose or cellular tissue, without periosteal or osseous base, and its sequence confirmatory of the observations of Paget, Rokitansky and others, that osteoid tumors, when removed, are liable to be followed by those of the encephaloid variety. The tumor was cartilaginous with cancerous structure running through it, in parts, too dense for the knife. The specimen was unique, and the case an exceedingly interesting one.

CALIFORNIA ACADEMY OF SCIENCES.

The regular semi-monthly meeting of this Society was held June 7th, President Blake presiding. The minutes of the previous meeting were read and approved. Edward Cohn, Hugo Eloesser, Arthur Eloesser, Dr. J. Van Zandt and Major George H. Elliott, U. S. A. were duly proposed as resident members.

DONATIONS TO THE CABINET.

Some limestone fossils were presented from W. H. Sears, Treasure City, and crystalized gold in crystalized quartz, from Mr. Warren, of Amador.

The resignation of T. A. Mudge, as Recording Secretary, was received and accepted.

THE ACADEMY LOT.

Mr. Yale, as Committee on Outside Lands to be conveyed by the City to this Association, asked for further time in order to make a further abstract of the title. He desired that Col. Ransom be associated with him in order that a proper survey of the land be made to accompany his report. On motion, Col. Ransom was added to the committee.

INVESTIGATIONS.

President Blake referred to a visit he had recently made to Petaluma. Whilst there he visited the locality where the bones of a mastodon were found. He saw only some small pieces, the large ones having been previously removed to San Francisco.

He examined the effects of the earthquake of last October upon the country around, and found its force more distinctly visible in the rocky portion or mountain range; while the marsh or alluvial soil was comparatively undisturbed.

California Medical Gazette.

SAN FRANCISCO, JULY, 1869.

☞ *All Letters and Communications to be addressed to the* "EDITOR CALIFORNIA MEDICAL GAZETTE, *care of A. Roman & Co., San Francisco.*"

REPORT OF THE COMMITTEE ON THE ACTION OF MERCURY ON THE LIVER.

We call the attention of our readers, to the report made by a committee of members of the British Medical Association, on the action of mercury on the biliary secretion.

It comes like the bursting of a bombshell, and destroys the belief of centuries.

To have doubted that mercury acted on the liver in increasing the secretion of the bile, to have fled in the face of all authority, to have contradicted every work on Materia Medica, and every writer on therapeutics, would and ought to have been regarded by all respectable people, as a most heterodox, if not positively insane proceeding.

It seems, however, as if there were some perverse, freethinking, reasoning, radical medical minds, who doubted this faith of ages, and who talked so loudly of their disbelief, that in order to quiet them and settle the matter, the British Medical Association appointed a committee to investigate it fully.

Some two years were spent in necessary experiments; the report is just published, and the gist of it is, that *Mercury, in whatever manner, dose or form it may be administered, has not the slightest influence in increasing the flow of bile from the liver.*

From the *British Medical Journal*, the organ of the association, we glean the following steps of the inquiry and the results obtained:

1. The amount of bile in the fæcal evacuations bears no relation to the quantity secreted by the liver. Purgatives certainly increase the amount of unchanged bile in the stools; but this is because they augment the rapidity of its passage through the intestinal canal, and thereby prevent its absorption and decomposition. The idea that inspection of the fæces can inform us how much bile is formed, is, therefore, erroneous. The only method of determining this point is by making fistulous openings into the gall-bladders of animals, tying the common ducts, and measuring the quantity produced.

2. The history of what was previously known as the amount of bile secreted in dogs, without and with mercury, was undertaken by Dr. James Rogers, a gentleman who had long practiced medicine at St. Petersburgh. He has an intimate knowledge of continental languages, and has made therapeutics a special study. He shows that, since the days of Haller, there is no well-observed fact which indicates that mercury acts as a cholagogue.

3. All the operations were performed by Dr. W. Rutherford, who gives a minute account of the best mode of producing biliary fistulæ, and the manner of collecting the bile. It was not without many failures and repeated disappointments that the experience was acquired which at length enabled the Committee to arrive at greater success in a larger number of cases than has characterized any previous investigation of a similar character.

4. A special investigation was next undertaken and carried through by Dr. Rutherford, to ascertain whether the dog was capable of being influenced by mercury in the same way that man is. It would have been obviously useless to have entered upon so laborious an inquiry with this animal, unless that point had been satisfactorily ascertained. It is conclusively shown that the dog is affected by mercury exactly in the same way as man; that he presents the same symptoms when affected by the drug; and that, when poisoned by it, the same *post mortem* appearances are produced. A complete refutation is subsequently given to the opinions of those who imagine that observations on dogs can tell us nothing of the influence of mercurial preparations on the human subject.

5. Thus instructed, the Committee succeeded in making the most accurate observations as to the amount of bile secreted before and after the administration of mercury to dogs, employing all kinds of preparations of that drug, various doses, large and small, and introducing it internally and externally. Permanent biliary fistulæ were established in nine dogs, and the amount of bile secreted, before and after mercury was given, carefully noted daily. During the two years over which the investigation extended, not only were the quanties of bile collected compared with the weight of the animal and the amount and nature of its food, but they were in every case analyzed, and the proportion of the liquid, solid, and inorganic matters ascertained. The whole series of observations present us with the most valuable collection of facts now on record with regard to the functions of the liver. In addition to demonstration that mercury is not a cholagogue, the report points out the influence of purgation on the biliary secretion, its relation to consumption of food, to the weight and to the health of the animal, and in what way it is influenced by muscular movements.

6. With a view of exhausting all that has been alleged concerning the influence of drugs on the liver, the Committee investigated, in the same careful way, the action of podophylline and taraxacum; and clearly show that these drugs have not, any more than mercury, the slightest influence as cholagogues.

There is no doubt, but that the investigations of this Committee, have dissipated a generally accepted error and taught the medical world a new truth.

Still, every practical man, every physician of experience knows, that if it be not in the power of mercury to stimulate the liver to increased powers of secretion, yet a proper dose will quickly stimulate its discharge from glutted bile ducts, and distended gall-bladder. This report of the Committee will consequently not shake his faith in a remedy that experience has taught him has such a prompt and often such a beneficial effect.

FEMALE MEDICAL COLLEGES.

We have before us the introductory lecture to the class of the Women's Medical College of Pennsylvania. The lecture was delivered by Rachel L. Rodley, M. L. A., Prof. of chemistry and toxology, October 15th, 1868. She says: "I have been deputed by the faculty to offer on this occasion, a tribute of respect and affection *in memoriam*." The late Isaac Barton, who was well known in Philadelphia as a wealthy philanthropist, and who bequeathed $25,000 to the Women's Medical College, was the subject of her memoir.

The lecturer informs us that Mr. Barton, "in addressing medical women by the written or spoken word, or in speaking of them, never omitted to do them honor by giving each her title." And that, if in his reading he met with anything referring to their cause, he transcribed the passage and sent it to some member of the faculty, many of which tokens they keep sacred to his memory.

"These influences, which seem so simple in the recital, proved as the dew and sunshine; they refreshed and they strengthened; how much, we can not know, until we have worked a while without them, as we begin to-day to do."

"At our last commencement, in March, Mr. Barton was unable, through increasing infirmity, to be with us. One month later he was called from labor to reward; his work well done, and the path of his going illumined by the sure light which leads to eternal day.

It was on the twenty-eighth day of April, that a large concourse of relatives and friends followed his remains to South Laurel Hill Cemetery. We committed his sleeping dust to the earth, when nature was awakening at the voice of beautiful spring. The violets everywhere dotted the sod that day, as we laid to rest the brother beside the sister, and the violets covered both; it did not seem so fearful a thing to rest after toil; to live seemed more solemn that to die."

The address is well written, and in every respect would do no discredit to any of the lords of the profession.

Their circular which announces that the twentieth annual session of the Women's Medical College of Pennsylvania, will open, October, 1869, contains the names of the ladies upon whom the degree of Doctor of Medicine was conferred, in March, 1869, —fifteen in number. Those of them, who possessed a liberal education before commencing the study of medicine, we congratulate, and send to them our greetings of welcome.

To those of them—if perchance there be any—whom ignorance may compel to compete with male impostures, in practicing cunning and knavery, in carrying death and misery into the family circle, in producing abortions, etc., etc., we would say, better far to lead the life of a common prostitute, than to spend a life in the practice of any and every species of deception and villainy, from which almost any other wretch would shrink.

Science, unlike the demagogue, knows neither sex nor nationality. To those of her children who stray into our profession, we will extend the right hand of fellowship, whether male or female, whether Jew or Gentile, whether Caucasian, Ethiopian or Mongolian.

Female medical colleges are yet an experiment, and whether they are to succeed or not, depends entirely on their system of education. They have before them the sad fact, that our system of medical education has totally failed to meet the requirements of what should be a learned and noble profession; owing to our faulty system of education, we have ceased, as a profession, to be classed among the learned. The instances to the contrary have become the exception, not the rule, and until our present system of medical education is reformed, and our culture improved, a high position among the intellectual classes for the physician, can be attained only by the individuals and not by the mass.

If the Female Medical Colleges will guarantee to the public, that every woman upon whom they confer the degree of Doctor of Medicine, is what the title should imply, viz: educated, we say, success to female medical colleges—give us female physicians.

The means of success are in their own hands. Let them affirm that the candidate for their degree shall present a diploma from an incorporated college, or submit to an examination by a board that will require of them the evidences of having received a liberal education. Let the examination for the degree be conducted by medical men and women, expressly appointed and paid for their services; then would the female physician have an acknowledged position among the liberal and the learned, which we have not, and to which we are not entitled. If, on the other hand, female medical colleges are to follow our example, and merely swell our crowded heterogeneous ranks, if their M. D. is to mean what ours does, a doubtful title to nothing in particular, then we hope that female medical colleges will meet with the success that their merit deserves,—the universal condemnation of the liberal and learned.

The *American Journal of Insanity* for April, comes to us with two beautiful stereoscopic pictures of the brain of a boy 15 years old, who died of apoplexy. The history of the case is given in the January number of the *Journal*, also a photograph of the late Prof. Greisinger of Berlin.

The *British Medical Journal* says that a special general meeting of the Fellows of the Royal Medical and Chirugical Society was held on the 3d of May, for the purpose of considering a plan for the amalgamation of the Society with other London Medical Societies. The result of the amalgamation is to be a new Society, incorporated by royal charter, to be called the Royal Academy of Medicine; which shall comprise sections for the main branches of medicine and the collateral sciences. 1, Medicine and Surgery; 2, Obstetrics; 3, Psychological Medicine; 4, Clinical Medicine and Surgery; 5, Pathology and Morbid Anatomy; 6, State Medicine—comprising Epidemiology, Public Health, and Medical Jurisprudence; 7, Physiology and Anatomy. Each section will entertain questions of Therapeutics, Chemistry, and Physics, so far as they bear on its special subject.

The Journal of the Gynæcological Society of Boston.—A monthly Journal, to contain the official publications of this Society, is to be issued under the editorial management of the officers of the Society—Drs. Winslow Lewis, H. R. Storer, and Geo. H. Bixty. "Each number will consist of not less than sixty-four pages octavo, printed in large type on fine paper." The first number will appear

in July,—Terms, $3 a year, in advance. If all of us, who have yet something to learn in this department of our profession, subscribe to this Journal, it will be a great success financially.

Our Correspondents.—We have much pleasure in stating to our readers, that the gentlemen, Drs. Keen and Treadwell, whose letters appear in this number, have promised to become regular correspondents to this "Gazette." They are well known to the profession in their respective cities as earnest, successful workers, who bid fair to attain the highest positions in our profession.

We have received Nos. 1, 2, and 3, of the new series of the *Glasgow Medical Journal.* It has been over forty years since this Journal made its appearance, under the editorship of the late Dr. Mackenzie, the celebrated oculist. The Journal is now the property of the Glasgow and West of Scotland Medical Association, and is edited by a committee of the Association.

J. H. Gemrig of Philadelphia, sends us a finely illustrated catalogue of his Surgical Instruments, etc.

BIBLIOGRAPHICAL NOTICE.

Criminal Abortion; its Nature, its Evidence, and its Law. By Horatio R. Storer, M. D., L.L. B., etc., etc., and Franklin Fiske Head, Boston: Little, Brown & Co., 1868, 8vo, pp. 215.

Dr. Storer is too well known, both to the profession and to the public, as a fearless writer on this subject, to require any lengthy notice from our hand. He alone perhaps, of all others, has done more to arouse the attention of all classes to the importance of this subject. This book is the result, Dr. Storer tells us, of nine years careful study of the subject of criminal abortion. We copy: "Eight years have passed. Not only has the medical profession been stirred to progressive action, but the outside community. Paper after paper on the subject has been issued by medical men; the religious press has become deeply interested; political economists have found, as has been indicated in a previous edition of of this book, an explication of otherwise inexplicable problems; an impetus of the most powerful character has been given to the movement, by the publication of the author's two books. The importance of the subject is rapidly becoming recognized by the legal as well as by the medical profession, and extracts from the author's writings upon the subject, have already affected the rulings of the courts."

The authors hope that the work may secure the approval of the two great bodies of professional men, for whom as a manual, it was written; we believe that it will, and are sure that it should.

It consists of two parts. The first part by Dr. Storer, views the subject "from the stand-point of medicine." The second part by F. F. Head, Esq., treats of criminal abortion legally.

Dr. Storer affirms, and with good reason, that the true character of the crime is not recognized, and that the crime is fast becoming, if it is not already become, an established custom. He goes on to examine in a masterly manner, the causes, the guilt of the crime, and the best means for its prevention. Altogether, the book is indispensable to the professional man who wishes to be well informed on this subject.

SURGERY.

CASES OF RECOVERY AFTER FRACTURE OF THE SPINE.

By W. Manifold, M.R.C.S., Surgeon to the Northern Hospital.

The following cases, I think, are of sufficient interest to bring under notice, as they afford further examples of recovery following a lesion which, as a class, we must regard as of a most fatal character. The word "recovery" is used necessarily in a limited sense, for though life has been saved, yet there are effects remaining which cannot be regarded as otherwise than permanent. In the first case, two years have elapsed since the injury, in the second, sixteen months, and in the third sufficient time to permit of my drawing conclusions favorably to the life of the patient.

FRACTURE OF THE SPINE IN THE LOWER DORSAL REGION.

Thomas P., aged twenty-eight, a sailor, in July, 1868, whilst at Quebec, fell from the ship's rigging on to the deck, a very considerable distance, alighting on his feet. He was removed to the Marine Hospital, where it was found that his lower extremities were completely paralyzed. The urine had to be regularly drawn off, and he had no control over the contents of his rectum. He remained in this condition for three months, when sensation, followed by movement, began very gradually to return. In six months he was able to get out of bed and move about with crutches, dragging his legs "almost as if they did not belong to him." He remained in the Hospital until he was sufficiently recovered to return to England. He was admitted into the Liverpool Northern Hospital on September 2d, 1867 (fourteen months after the accident). On admission he drags his legs a good deal, but is quite able to get about with the aid of a stick. Sensation is natural everywhere. Has full control over the rectum, but occasionally has difficulty in passing his urine. The temperature of the limbs was as follows:

Upper extremities, 99¾ Fahr.
Lower " 78 "

there being a difference between the two of 21¾ degrees.

On examining the spinal column, the spinuous process of the twelfth dorsal vertebra projects very considerably beyond the others, forming a well marked, though small "hunch." On the left heel there is an ulcer, caused by a nail at the time of the accident, which has never got well, and for relief of which he has come into hospital. The ulcer is deep, about the size of a sixpence, with hard callous edges. I removed some of the hard skin about the ulcer, had the legs galvanised, and the temperature raised by artificial heat, a stimulating ointment being applied to the wound. The ulcer took some time healing, but he eventually left the hospital quite well, as far as the wound was concerned, and in general health.

It is interesting to observe the delay that took place in the repair of the injury to the heel, in consequence of the impairment of the nerve force in the lower extremities generally. The alteration of temperature was well marked, and suggestive of the treatment that would be calculated to promote due reparative action, which since the injury to the spine has been in abeyance.

FRACTURE OF THE SPINE IN THE MIDDLE DORSAL REGION.

Peter R., aged forty-one, a sailor, was admitted into the Northern Hospital on April 18th, 1867, suffering from an injury to the back, caused by a fall from aloft, a distance of some fifty or sixty feet. On admission his lower extremities were completely paralyzed, the bladder and rectum being also involved. On examining the spine, no displacement could be detected till six weeks after the injury, when a prominence was noticed about the seventh dorsal vertebra. This gradually increased while he was in the hospital, until it formed a well marked elevation. For some time the patient remained in a very precarious state; his present condition, August 23d, 1868, sixteen months after the accident, is as follows:

His health is very good. The urine is rather offensive, of acid re-action, and constantly dribbling away. The bladder is apparently small, as, on introducing a catheter, not more than one ounce of urine is removed. Bowels very costive. Sensation and motion absent in the left leg, both very slight in the right. Right leg a little below the normal temperature, left, very much below. As a rule he eats and sleeps well, and his time is occupied in making various small articles, such as balls, models, etc.

This case is one where life might be prolonged and enjoyed for many years, as far as the spinal injury is concerned, if the patient's circumstances permitted his obtaining the many luxuries which art has provided, in the way of water beds and other contrivances, for the permanently paralyzed.

One or two points of special interest may be noted. 1st.—No spinal deformity appeared until six weeks afted the injury. The fracture was probably of a comminuted nature, and coalescence eventually took place by the absorption or protrusion forwards of the separated portions of the injured vertebræ. The spinal column now appears quite firm, permitting the patient to sit up in bed without support, and move the trunk freely. 2d.—The right lower extremity suffered much less than the other. There is a slight degree of both movement and sensation, and a corresponding approach in the temperature of the limb to that of the body generally.

To these cases may be added the following one, which came under the care of my colleague, Mr. Harrison.

A dock laborer, aged forty-two, was admitted into the hospital in December, 1867, in consequence of injuries sustained by falling down a ship's hold, a distance of some thirty feet. The right arm was completely paralyzed, the corresponding leg partially so. There was less movement of the right side of the thorax than the left. Sensation on the right side was generally impaired. There was no priapism, and the patient had full control over the bladder and rectum. There was considerable fullness about the lower cervical region, and the spine of the sixth vertebra was out of the line, and diverted towards the left side. The patient was placed on a hair mattress with the head level with the trunk and supported by sandbags, so as to prevent movement. The treatment was continued for a month, when the patient became very restless, and it was quite impossible to continue it as long as it appeared desirable. The paralytic condition of the leg gradually passed away before the patient left the hospital; the arm, however, was very slow in showing signs of amendment. Under the influence of galvanism, friction etc., its condition improved, until about seven weeks after the injury, when the patient was lost sight of, in consequence of being discharged from the hospital for very disorderly conduct.

From the condition of the spine previously described there is little doubt that fracture, or dislocation, or both, existed, but to such a limited extent as only to partially interfere with the functions of the cord. One side only being involved, the power over the bladder and rectum was not lost.—*Liverpool Medical and Surgical Reports.*

AN IMPROVED MODE OF REDUCING BACKWARD DISLOCATIONS OF THE ELBOW JOINT.

By Wm. H. De Champ, M. D., of Grand Rapids, Michigan.

I deem it the duty of each member of our profession to bring to light and place upon record, any improvement, either in surgery or the general practice of medicine, whenever he becomes satisfied of its worth.

This system, or course of procedure, of placing upon record any principle or fact likely to prove of service to the profession at large, is one of the distinctive differences between pure scientific procedure and that of charlatanism.

This I propose to do with regard to a method of reducing backward dislocations of the *elbow joint*, which has proved far more simple and easy than any of the methods now in use or at present recommended.

My attention was first called to this while reflecting on the great simplification made in the reduction of dislocations of the *hip joint*, by Dr. W. Reed, of Rochester N. Y., at so late a date as 1851. So important an improvement as this, to be made after thousands of as eminent surgeons as will ever adorn the profession, had failed to discover it, was enough to cause inquiry, whether other joints had not been equally neglected.

Laying aside all knowledge of reduction of the elbow joint in the backward direction, and taking the anatomical structure of this joint into account, I was forcibly struck with the ease with which this dislocation could be produced, by the hand becoming fixed, and then flexing the arm in the wrong or backward direction. This, I had always noticed, was the position patients would always give as the one the arm was in when it was dislocated.

I found, as every one will, that by simply placing the bones in the position of this injury, and then commencing to flex the arm in the backward direction, while the fore-arm is pulled slightly forward, the olecranon process is caused to glide directly along the posterior flat surface of the humerus until it arrives at the olecranon fossa, when the reduction is accomplished by simply flexing the arm forward into its normal position.

Within the past four months I have reduced three cases by this method. The mode of manipulation is as follows, viz: The wrist is clasped by one hand, while the other is placed back of the elbow, and the effort made to flex the arm in the wrong or backward direction, at the same time moderately pulling upon the wrist, when the bones are found readily to resume their normal position; the work being accomplished in far less time than it can be described.

By this method the coronoid process is not drawn directly into the olecranon depression, as it is by pulling in the straight line as sometimes recommended, but is lifted out of, or over it, with no more strain upon the ligaments than is required to let it pass out of its normal place.—*Detroit Review of Medicine.*

DIAPHRAGMATIC HERNIA.

By N. Sherman, M. D.

Chicago Medical Journal:—By the politeness of Dr. J. D. Gray, I witnessed the examination of the body of Wm. Frantz, aged about twenty-five years. He was wounded in

the U. S. service, in 1863, the ball entering at the lower portion of the ensiform cartilage and passing backwards and slightly upwards, making its exit on the same side just to the left of the spine. After the healing of the wound until April 5th, 1869, his general health had been good. On that day, while making great exertion pulling at a rope, he was taken sick with severe pain in the stomach and vomiting. From that time until his death, eight days after, all medical aid gave no relief.

AUTOPSY.

Twenty-four hours after death, Drs. Gray, Baily and Lessley. Considerable emaciation, abdomen sunken, left side of the chest much enlarged, after opening the chest and abdomen. The stomach was found where the left lung should be, much enlarged and distended with fluids and gas, compressing the left lung into a very small space at the superior portion of the lung cavity, at the same time forcing the heart wholly to the right side of the sternum, posterior to the ensiform cartilage, and to the left, in the line of the gun-shot wound, was an opening from one and a half to two inches in diameter, through the diaphragm. Through this opening the stomach proper, the large omentum and intestine were unmistakably strangulated, while the stomach, except slight traces of inflammation, appeared quite healthy.

The thickened, smooth condition of the edges of the opening in the diaphragm clearly indicates that the opening had existed at the time of his wound. He had been, during the greater portion of the time for the past five years, actively engaged at hard labor, without suffering any pain or considerable inconvenience. That the passage of the stomach, omentum and intestine through the opening in the diaphragm compressing the lung, was recent, was evident from the fact that the lung was partially inflated to its normal condition.

THE ARREST OF HEMORRHAGE BY TORSION AND TRANSFIXION.

The following letter to a leading surgeon of this city has been kindly placed at our disposal. It contains surgical suggestions quite ingenious and worthy of trial.

DEAR SIR.—Permit me to call your attention to a means of arresting arterial hemorr age by *torsion* and *transfixion*, as suggested in an article I contributed to the *New Orleans Journal of Medicine*, (April No., 1869.) It is done in the following manner:

Let the artery be taken hold of with a torsion forceps, and twisted on its axis until reduced to a cord shape, and then transfixed with a needle. The transfixing needle may be introduced from the cutaneous surface, or a short needle, threaded with a small wire, may be introduced within a short distance from the bleeding artery, into the cut surface of the wound; in either case the point of the needle should be brought out at the artery, it being twisted; the needle is made to transfix it, and is then pushed forward into the fleshy parts beyond, sufficiently far to secure it permanently in this twisted condition.

Now what are the obvious advantages of this method of stanching a bleeding artery in a surgical manner? In the first place, we are enabled to secure the bleeding vessel against hemorrhage as effectually as it can be done with a ligature. A large artery can be twisted until its walls are made to collapse two thirds of an inch or more above the cut surface. If this twist is maintained by the needle, it is not likely that hemorrhage can take place. In the next place, we are able to withdraw the needles, the short one, if used, by the wire attached to it, in the shortest time it may be thought safe to do so without danger of hemorrhage. The wound being free from the irritation of stanching instruments, is placed in the most favorable condition to heal by the first intention.

I am disposed to think that an artery secured in this way would not be so likely to endanger the life of the patient from secondary hemorrhage; the very condition of its being twisted for some distance above the cut surface, would almost preclude the possibility of such an accident.

The ability to remove at will the stanching instruments before suppurative action usually takes place, will greatly lessen the danger of purulent infection; the patient being in a favorable condition, the probability is that the wound will heal by the first intention, if managed properly.

If these two accidents, purulent infection and secondary hemorrhage, can be obviated in any degree by the means I have suggested, the surgeon will certainly feel less hesitation than heretofore in using the knife for the benefit of his patient. As the case has been, he frequently had to make a choice between the evils, the existing disease and the accidents liable to follow an operation.

The needle is used merely to prevent the transfixed artery from untwisting. The force of the pulsating vessel would be on the twisted portion, and the effect of this force would be to impact the twist the more, and thereby diminish the chance for blood to escape. This can be tested very easily in the dead subject before trusting to it in the live. The reason I have not tested the value of torsion and transfixion in arresting arterial hemorrhage, before calling the attention of the profession to it, is owing to my circumstances. I am mostly engaged in the practice of medicine in a village and the surrounding country, where it is only occasionally I have a case of surgery to treat; it might, consequently be a long time before I could test the plan satisfactorily. I therefore thought it best to suggest it to others, who are more favorably situated, to determine its advantages or disadvantages.

K. MCKINNON, M. D.

Pleasant Hill, Ala., April 30, 1869.—*Medical and Surgical Reporter, Philadelphia.*

PRACTICE OF MEDICINE.

TREATMENT OF CROUP.

Dr. Abeil publishes his treatment of croup in a memoir directed to the Académie des Sciences, and printed in the *Gaz. Med. de Paris*, Nos. 34–39. He reports nine select cases successfully treated by this method, three of which became of especial importance, as the parents did not permit the operation for tracheotomy, recommended unanimously by the attending physicians. His method comprises three main points: 1st, The inhalation of the moist vapors of the sulphide of mercury; 2d, The use of emetics; 3d, The nutrition of the patient. The inhalations are made in the following manner: A vessel with a large mouth, and heated by means of a spirit lamp, is placed as close to the patient as possible. In this vessel a decoction of mallows and violets is kept constantly boiling, to which is added two grammes of cinnabar every two or three hours, without interruption, from the beginning till the termination of the disease. The smaller the sick-room, the better for the patient. In a few hours the room is filled with vapors, making themselves known to every person entering the room by the irritating effect of the cinnabar on the throat. If the vapors become temporarily too strong, the evaporation may be suspended for a short time. Usually the patients subjected to these

inhalations experience relief after twelve to thirty-six hours, which is manifested by the cough becoming less harsh, and assuming more of a catarrhal character. In this manner the pseudo-membranes are readily separated, and consequently more easily expelled during or after emesis. The observations made on laborers handling mercury continually, and on patients treated by mercury, show positively the dissolving action of this metal on the filbro-albuminous substance of the blood. On this account it is employed in croup. Very little confidence, however, is placed in its employment, as its absorption through the skin or alimentary canal varies too much. The author has therefore resumed the use of this powerful agent in a different way, by passing the vapors of the sulphide of mercury over the mucous membrane of the respiratory tract, thereby producing a local as well as a general action. The entrance of the mercurial vapors with the inspired air cannot be denied, and its action is proved by the described results. As an emetic, the syrup of ipecac is used in the beginning; afterwards, if too mild, tartar emetic is used, in spite of its depressing influence. Abeil administers an emetic two or three times daily. In employing an emetic, two actions must be distinguished—its general relaxing effect and its local effect,—the latter facilitating the removal of the already partially separated membranes. The administration of food is necessary in order to fortify and support the system against the destructive influence of the diptheritic elements. The food may be given in any shape, with diluted wine as a tonic, which the patients usually like to drink. Abeil hopes by this thoroughly medical treatment to do away with tracheotomy, an operation almost never successful in adults, and but rarely in children under two years of age, while it has no influence whatever on the advance of the malady, merely serving to prevent death by asphyxia. —*American Journal of Obstetrics.*

THERAPEUTICS.

THE MEDICINAL ACTION OF BELLADONNA.

The following conclusions, in reference to the action of belladonna, arrived at by M. Meuriot, cannot but be of interest to our readers.

I. Atropine is the active principal of belladonna, and assumes all the properties of this solanum.

II. The intensity of its action varies with the species of animals. Herbivora are less sensible to its action than the Carnivora. In man its poisonous action is most violent; but no animal is exempt.

III. Its action also varies with the dose employed; for small doses accelerate the heart's pulsation and augment the vascular tension; poisonous doses diminish the tension and modify the cardiac pulsations.

IV. Belladonna is a vasculo-cardiac poison, in the classification of M. Sée. Its action produces especially the innervation of the heart and of the vessels.

V. The varied phenomena produced by atropine depend mostly upon its primordial and elective action, or are due to the elimination of the poison.

VI. Atropine acts upon the heart through the pneumogastric nerve, whose peripheral extremities are paralyzed. It augments the frequency of the cardiac pulsations.

VII. In a small dose it augments the tonicity of the vascular muscles; in a poisonous dose it diminishes, and even destroys this; whence the application of belladonna to epilepsy, in which the success seems to be due to modifications of cerebral circulation.

VIII. The variations of the arterial tension are subordinate to the state of excitation or paralysis of the muscular coat of the vessels.

IX. In small doses atropine accelerates the respiration; in poisonous doses it diminishes its frequency.

The acceleration of these movements depends upon the excitation of the respiratory centres; the consecutive retardation, upon a paralysis of the extremities of the vagi nerves; whence its application in the treatment of asthma.

X. Atropine, in a therapeutical dose, increases the activity of the excito-motory functions of the spinal cord.

In a poisonous dose it exaggerates the reflex power till it may produce convulsions.

XI. Atropine always produces agitation, insomnia, delirium, and in a poisonous dose, coma; it is not at all a narcotic.

XII. Atropine is eliminated by the kidneys, by all the mucous surfaces, and sometimes by the skin of man. Its elimination is always rapid; so that the action is of short duration.

XIII. The effects due to elimination are numerous, viz. redness of the mucous surfaces and of the skin, frequent desire of micturition; colic; anal and vesical tenesmus; profuse sweat, diarrhœa, etc.

XIV. The redness and dryness of the mucous membrane explains aphonia, dysphagia, dysuria, etc.

XV. Not only are all the secretions of the mucous membrane diminished, but there may be also, on account of the activity of the circulation, a rapid reabsorption of the liquids which have exuded from mucous surfaces or from wounds; whence its advantage in exaggerated secretions, and its effect upon coughs, etc.

XVI. Atropine applied locally to the tissues, produces an activity of the capillary circulation, and, in a considerable dose, true hyperæmia and sanguineous stasis.

Angina and erythema produced by belladonna are analogous to the inflammatory process.

XVII. The modifications of the urinary secretions are dependent upon the variations of the arterial tension.

XVIII. Belladonna is not a paralyzing agent to the smooth muscular fibres; it produces no phenomena of paralysis except in a very powerful dose, and in those cases it follows exaggerated contractions; thus it is of benefit in incontinence of urine and of the fæces, in paralysis of the bladder, in constipation, irreducible hernias, etc.

XIX. Atropine has no elective action upon the sensitive nerves. Its local application is always followed by acute and persistent pain. Atropine acts only upon nerves in a state of hyperæsthesia and often determines analgesia, but it should be applied directly upon the seat of pain (les nerfs affectés).

XX. Small doses of atropine augment, toxical doses diminish, the temperature.

XXI. Atropine, especially, possesses the property of causing dilation of the pupil, and this is its most constant and persistent effect.

It paralyzes the terminal branches of the third pair of nerves; this is the only fact well shown by the experimental physiology, in the study of the hyoscyamus also. (Gubler Mydriasis caused by Belladonna.)

To this paralysis of the ciliary branches of the nervus motor ocularis communis is attached the paralysis of the muscle of accommodation.

XXII. Certain experiments and several considerations that have been made public by the author, tend to show

some exciting action upon the sympathetic nerve or upon the *dilatateur*. However, a more vigorous demonstration is still essential.

PHOSPHATE OF SODA IN THE INTESTINAL TROUBLE OF CHILDREN.

BY WILLIAM STEPHENSON, M.D.

The cases in which Dr. Stephenson recommends phosphate of soda are chiefly the following:—

In infants who are being artificially reared, and who are liable to frequent derangement of the bowels; also when the phosphatic elements in the food seem deficient, or when articles of food rich in phosphates, such as oatmeal, disagree; where from the character of the motions there is a deficient or defective secretion of bile. It is thus of service in cases of chalky stools or white fluid motions. Dr. Stephenson has also found it of service in many cases of green stools. In diarrhœa, generally, it is more difficult to distinguish the classes of cases. In simple diarrhœa, such as we frequently meet with in summer months, he has not found it of much service alone, although it may be of use when given in combination with other remedies. It is chiefly in that class of cases which are more properly termed duodenal dyspepsia that it is of benefit. Diarrhœa after weaning is generally of this nature, and the cases are often chronic, or of some weeks' standing, the mother generally having exhausted her own and the nearest druggist's resources before applying for advice. It is also of service in some cases where diarrhœa is due to some general cachexia.

He also uses it with adults in some cases of constipation, and in cases of duodenal dyspepsia. He likens its action in phthisis to that of the hypophosphites of soda.

The dose for children is four to ten grains in the food; for adults, twenty to forty grains in water, and taken at meals. —*Edinburgh Medical Journal.*

PEROXIDE OF HYDROGEN.

Dr. B. W. Richardson sums up the therapeutic action of this article in the following words: "The solution of the peroxide of hydrogen may be fairly considered a medicine which promotes glandular secretion generally, quickens the action of iron, and which, to a certain extent, represents mercury and iodine as a specific remedy for syphilis. Problematically it may be considered as having an influence on nervous function, preventing or reducing over-action. It deserves on this ground extended trial in epilepsy. It is useful as a means of relief in dyspnœa in cases where there is great destruction of the lung and deficient oxidation; but whether its effect is due to the direct addition of oxygen to the blood, or to a sedative action on the nervous centres, or to the promotion of secretion from the liver and kidneys, and the removal of temporary congestion, is not known.

"*Mode of Administration; Dose.*—The solution of the peroxide containing ten volumes of oxygen is the best form for medicinal use; a trace of hydrochloric acid in the solution is of advantage, as the acid helps to retain the oxygen. I prefer always to prescribe the solution simply with distilled water, for although there are many medicinal substances with which it is compatible if they are chemically pure, it is best not to run the chances of the displacement of the oxygen by admixture. The ordinary dose for an adult is from one drachm to four, but this may be gradually increased to six drachms or even an ounce. A free quantity of water should always be mixed with the solution when it is to be taken; too concentrated, it leaves a caustic metallic taste in the throat, and causes eructation."—*Medical Times and Gazette, and Amer. Jour. of Med. Sciences.*

IODINE IN SURGERY.

Mr. B. W. Switzer, Asst. Surgeon, 6th Punjaub Infantry, relates (*Medical Times and Gazette*, Sept. 19, 1868), the following curious case: A Hindoo boy, aged about four years, was brought to him for treatment. On examination the right humerus was found to present a uniform enlargement, from about three inches below the head to within two inches of the condyles, tapering above and below. The history of the case was that the boy had been running from something that had frightened him, and fell heavily on his arm, sustaining a bad comminuted simple fracture through the whole extent of the middle third of the bone. Residing far from any surgical aid, his people simply let him alone, and this tumor was but nature's rough surgery. No trace of crepitus remained; it was from head to condyles one solid bone Such was his state eight months after the accident. Mr. S. was at a loss what to do; he allowed the boy to run about, and his general health improved, and finally, for the sake of doing something, he ordered him an ointment containing 100 grains of iodide of potassium and ten grains of iodine to an ounce of lard, to be rubbed into the tumor twice a day; he was also to take internally a grain of the iodide twice daily. After treatment of this kind for about three weeks, on examining the arm, crepitus was detected and the tumor found, like an iceberg in summer, rapidly breaking up in every direction. Finally all the callus was absorbed and the fragments left movable. All medicine was then stopped, and the bone properly set in splints. He made a capital recovery, callus being again thrown out; and the fragments re-united in their proper places.—*Med. and Surg. Reporter.*

GYNÆCOLOGIA.

ON THE DIAGNOSIS OF ACCIDENTAL HEMORRHAGE FROM PLACENTA PRÆVIA.

By Edward Calthrop, L.R.C.P.

The os uteri being unopen, and therefore a physical demonstration of the placenta impossible, any evidence by which we can determine between the two conditions mentioned at the head of this paper must be of value: I speak of the diagnosis of placenta prævia from accidental hemorrhage in the later months of pregnancy.

We all know, who have had experience in midwifery, the soft, velvety, hot feel of a gush of uterine hemorrhage, when that takes place the hand being in the vagina. It is from the character of the discharge we are to form our diagnosis in the present case.

In a case of placenta prævia—say at the sixth month—the discharge, if any, is blood "pur et simple," and on examination the vagina is most likely full of, or at least contains clots. In a case of accidental hemorrhage, the discharge is liquor sanguinis, and the vagina free from clots; and it is easy to understand how this is. The blood in placenta prævia comes directly from the uterine or placental vessels, or both, into the vagina, and is there discharged as blood, leaving coagulations behind in the vagina; whereas, in accidental hemorrhage, the blood before being discharged, has to find its way to the os; separating the membranes as it comes down and depositing its fibrin, so that the discharge is liquor sanguinis, and the vagina is free from clots. How often, in

a case of accidental hemorrhage arrested and gone to full term, do we not find, on the placenta being expelled, a large mass of fibrin discharged with it (I have more than one in my possession, and have seen numbers). In like manner, after a confinement in which perhaps a small piece of membrane has been left behind in the utero, serving as a nucleus, do we not find the discharge "dirty water," as the nurse says, the uterus large above the pubes, and the patient week and blanched; the fibrin is deposited, and the liquor sanguinis discharged; and the mass, if allowed to remain in utero, prevents the proper contraction of that organ, and is often the precursor of disease, retroversion, etc., and may account for the moles, "false conceptions," etc., so frequently described. But this is scarcely belonging to my subject.

Finding no mention, then, in any authority of this mode of diagnosis (one of many) between these most serious complications, and knowing, by experience, that it is fully to be relied upon, except in cases in which the placenta is very near the os, or the hemorrhage very profuse, must be my excuse for publishing these few rough notes.—*Lancet and N. Y. Medical Gazette.*

THE INTRODUCTION OF THE CLAMP IN OVARIOTOMY.

Mr. T. Spencer Wells writes as follows to the editor of the *Boston Medical and Surgical Journal*, in reply to a letter from Dr. Parks, inquiring who was entitled to the honor of having invented the clamp used in his operations in ovariotomy:

"The credit of the introduction is due to Mr. Hutchinson, Surgeon to the London Hospital. He first used one in 1858. It was simply the common calliper of carpenters, which he used and left applied, handles and all. Then the handles were made moveable, so that they could be taken off as soon as the clamp was fixed. Then I made the blades parallel, and did without handles. But I afterwards returned towards the original form of clamp, altering the joint and the form of the opposing surfaces of the clamp until I arrived at that which I now use. You may see it figured in Druitt's Vade Mecum, ninth edition, 1865, page 541. I have now (January 25, 1869,) completed 300 cases.

Of the 1st	100	cases,	64	recovered	and	34	died.
2d	100	"	72	"	"	28	"
3d	100	"	77	"	"	23	"
Total	300	"	213	"	"	85	"

A general mortality of 28 per cent., but it is very encouraging to note that the mortality has been steadily diminishing with increasing experience."

Since October last he has completed the operation of ovariotomy in 36 cases. Of the 36 women, 31 recovered and 5 died; and it is a remarkable fact that in *every case* in which the pedicle was long enough for him to use the clamp, the patient recovered.—*N. Y. Medical Record.*

RED LINE AROUND THE FUNIS, A SIGN OF RETARDED BIRTH.

Dr. J. B. Bond (*Medical Times and Gazette*) reports the following case of retarded birth: In the year 1849 he was summoned, on March 24th, to see a pregnant lady who felt quite sure that she had been pregnant some weeks more than nine months. He found her very large and very clumsy, but without any signs of labor. On May 9th, he was again called. She had, when she sent for him, some slight pains, but these had entirely subsided before he reached her place of residence. On May 16th, between her eleventh and twelfth month, according to her own reckoning, he was again in attendance. The os uteri was dilated, the membranes were ruptured, and a natural presentation existed. After a long and painful labor she was delivered of a very large still-born male child, which had perished during labor. On examination he found, encircling the umbilicus of the child, just where the funis joins it, a bright red ring less than two lines wide. Since 1849, he has observed this red ring in three other cases, in all of which there were good reasons for believing that the children had been retained in utero beyond nine months. Only one of these children was still-born. He believes that this red ring always indicates retardation, and that in such cases it may always be found if carefully looked for.—*N. Y. Medical Record.*

DILATATION OF THE OS-UTERI AND PERINEUM DURING LABOR.

Dr. George Kilner (*Chicago Medical Jounal*), in a communication on this subject, recomends, when other medicaments have failed, the use of lobelin. He praises its efficacy, and recommends that a suppository be made of lobelin, gr. v., to cacao butter, 3j., and introduced into the rectum immediately upon the subsidence of a pain, and also anointing the os with the same. He states that fifteen or twenty minutes retention of the suppository is generally sufficient to produce complete restoration of the os and perineum.

HYPODERMIC INJECTIONS OF MORPHIA IN LABOR.

Dr. E. Korman, Leipzig (*Am. Journal Obstetrics*), considers hypodermic injections of the sulphate of morphia superior to any anæsthetic during labor. He injects very slowly one-eighth to three-fifths of a grain in the thigh. The indications for the injection are: Primiparæ, narrow pelvis, spasmodic contractions, and painful complications generally.

MISCELLANEOUS.

Pin Worms, their Homœopathic Treatment.—Dr. Buckingham, (*Boston Medical and Surgical Journal*) says the *New England Medical Gazette*, (homœopathic) for February 1869, contains an article on entozoa, which is a light not to be carelessly placed under a bushel, if its merits be equal to the editor's comments:

"One of the most important discoveries of modern medicine, and which, *if fully substantiated*, will eradicate a very troublesome as well as common affection, was presented at the meeting of the Boston Academy of Homœopathic Medicine, on January 25th, 1869.

"Dr. D. G. Woodvine exhibited under the microscope some beautiful specimens of the ova or eggs of the oxyuria,, or common pin worms. *By careful investigation, he has ascertained that these eggs require light and air to hatch them.* For this purpose they are always deposited outside of the sphincter ani, where in a very few hours they are hatched, and the worm makes its way into the bowel. *Now by keeping the parts, for an inch or two around the anus, covered with a thin layer of lard, the oxyuria cannot deposit their eggs, and as the life of the animal does not exceeed seven days, they can be wholly exterminated in the most severe and troublesome case in that time. The amount of suffering that may be saved by this simple discovery is incalculable.*"

In conclusion, the Dr., to whom the italics are due, facetiously suggests that "to follow up the treatment with a certainty of success," not only must the part for an inch or two around, be covered with lard for seven days, but the patient must refrain from using and especially from "sunning" it for the same period.—*Medical Archives.*

A New Anæsthetic, or rather, an improvement upon an old one, is proposed by Dr. E. Andrews of Chicago. A recent number of the *Chicago Medical Examiner* contains a paper by Dr. Andrews, giving the results of some experiments with the nitrous oxide in association with certain quantities of free oxygen. The object of these experiments was to ascertain if, by mixing oxygen with nitrous oxide gas, it might not have conferred upon it a *sustaining power*, so as to be applicable to the longest surgical operations. It is well understood that, while nitrous oxide acts promptly, and leaves none but the most agreeable sensations behind, its healthy anæsthetic action cannot be very long continued. For use in extracting teeth, and for minor surgical operations, it is better and more desirable than either ether or chloroform; but for the more serious surgical cases, requireing the patient to be kept insensible for a long time, it has been found to produce unpleasant and dangerous symptoms.

The theory regarding the cause of these effects is, that the oxygen is so firmly locked up in the combination that it cannot aid in the revivification of the blood, and hence is as inert as the oxygen of carbonic acid. The nitrous oxide needs to hold in mechanical combination sufficient oxygen to sustain life while it is acting to produce anæsthesia. Dr. Andrews claims that his experiments prove that *oxygen-mixed nitrous oxide* is an agent perfectly safe to use in the longest as well as the shortest surgical operations, and that it forms the pleasantest and best anæsthetic known. He recommends one volume of pure oxygen to be mixed with three of nitrous oxide, and remarks that care must be used, in administering it, that no atmospheric air becomes mingled with it.—*Boston Journal of Chemistry.*

Hypodermic Use of Stimulants.—Professor Halford, treats snakebite by injecting a solution of ammonia directly into the veins, with the object of insuring its immediate transit to the nervous centres and thus effecting their direct stimulation.

Dr. D. Weir Mitchel, *New York Medical Journal*, regards this "a perfectly rational means of rousing the enfeebled heart," and thinks that where immediate stimulation is the paramount indication, "alcohol might be used hypodermically or be thrown into a vein with success."

The editor of the *Medical Bulletin* says.

"There can be no doubt of the truth of this suggestion, for we have given it a practical trial. Some two years since we were called to a lady who seemed to be in *articulo mortis*, as the result of an acute and prostrating diarrhœa. Her skin was cold, her muscles rigid, her respiration scarcely distinguishable, her face Hippocratic, her pulse imperceptible, and her heart beating reluctantly and feebly. The collapse was so profound that their scarcely seemed a probability of rescuing her from the embrace of death. Appreciating the fact that it was too late to administer remedies either by the mouth or rectum, we immediately injected subcutaneously, several drachms of whiskey in an undiluted state. In an instant the heart felt the stimulus, started from its lethargy, and propelled throughout the system a full tide of vitalizing blood. The pulse came out at the wrist, the lungs grew more active, heat returned to the surface, and her lustreless eyes gleamed again with the light of life. Under the employment of appropriate remedies, this lady gradually recovered, and is now a living proof of the fact that "alcohol may be used subdermically, with success," in cases of exreme prostration.

"Since then we have been in the habit of attempting to 'rouse the heart' in cases of profound collapse, by introducing alcohol under the skin; and have accomplished results in this connection which otherwise would have been impossible."—*The Medical Archives.*

New Colour Test for Blood.—We announced some time ago that an important test for blood has been discovered in Australia; consisting of the application of tincture of guaiacum and ozonized ether, which produces a beautiful blue tint with blood or blood stains. The test is excessively delicate, and we happened to be present at a lecture given by Mr. Bloxam, in which he showed some experiments with it, and added that, in the case of a blood stain twenty years old, he had extracted a single linen fibre with an almost inappreciable amount of stain on it. The characteristic blue colour was immediately induced by the test, and readily detected by microscopical examination. The testimony of so able a chemist leaves no doubt as to the value of the discovery. Ozonized ether, we may remark, is merely a solution of peroxide of hydrogen in ether.—*Lancet*, March 20, 1869.

Fish as an Article of Food.—Professor Agassiz, in his address before the Committee of the Legislature of Massachusetts, on the propagation and preservation of fishes, says, as reported in the *Boston Journal*: "The fish enters largely into the requisitions of the human system. It is a kind of food whfch refreshes the system, especialy after intellectual fatigue. There is no other article of food that supplies the waste of the head so thoroughly as fish diet; and the evidence of it is in the fact that all the inhabitants of the seashores the world over are the brighter population of the country. Fish contains phosphorus to a large extent, a chemical element which the brain requires for growth and health. He would not say that an exclusive use of fish would make a blockhead a wise man, but that the brain should not be wanting in one of its essential elements."

A New Remedy in Erysipelas.—A new agent for the treatment of this disease has been brought to light by Professor Lucke, of Berne, who reports in a German periodical a large number of cases which show the salutary action of the oil of turpentine in averting infectious and traumatic erysipelas. Prof. Schutzenberger, of Strasburg, has investigated the truth of the statements and he declares that the results obtained by him accord perfectly with those published by Professor Lucke. In four cases the disease had been very rapidly cured by turpentine inunctions, the local disease being checked and the temperature reduced from the third to the fifth day of the disease. In the cases thus treated the disease neither persisted nor extended from the moment of its invasion.

Gratuitous Medical Advice in China.—The gratuitous distribution of medicine is quite common in China. In the summer especially, certain remedies much prized by the people may be obtained free of charge from societies which include this among other objects for which they are instituted. There is a very common mode of practising the healing art, professedly from benevolent motives, in which a selfish motive is too apparent. Notices may continually be seen placarded in public places, calling the attention of the public to some distinguished personage of the Æsculapian school, who has learned his art at the capital, or from some foreigner, or from some distinguished native practitioner, or by communication with the genii, who is desirous of relieving those who are in a condition of suffering and distress, and will give them an opportunity to avail themselves of his knowledge and skill without charge, except for the cost of medicine.—Nevins's *China and the Chinese.—Brit. Med. Journal.*

DIED.—In Philadelphia on the 26th of May, JAMES RUSH, M. D. at the mature age of eighty-four years. Dr. R. was a son of Dr. Benjamin Rush, one of the signers of the Declaration of Independence and the renowned Professor of the Practice of Medicine in the University of Pensylvania in 1809, and during the earlier portion of his life was engaged in the practice of medicine, but a number of years since he withdrew from professional pursuits and devoted himself mainly to the cultivation of literature and philosophy. His principal work "On the Philosophy of the Human Voice," is pronounced by those competent to judge, to display deep research and to be a production of high order of merit.—*News and Library.*

THE Editor of the *American Journal of Obstetrics and Diseases of Women and Children* offer the following prizes (in gold) for Essays: $50 for the for the best essay on "Catarrh of the Uterus, its Etiology and treatment;" $100 for the best essay on "The Morbid Anatomy of the Placenta;" $50 for the best essay on "Electricity in the Treatment of the Diseases of Infants and Children;" $100 for the best essay on "Congenial Deformities and Diseases depending on mal adies of the Uterus or membranes." The first and third are to be sent to the publishers on or before March 15th, 1870. They may be written in English, French or German.

BRIEF COMMUNICATION.—The shortest original communication on record in medical literature, is published in the *St. Louis Medical and Surgical Journal* as follows:

JEFFERSON CITY, Mo. Jan. 26, 1869.

"A few weeks ago I had a case of poisoning with sulphate of morphia. The person was in a dangerous condition. I injected a grain of pure caffeine with the hypodermic syringe, and after I had injected three grains in ten minutes, the person recovered quickly. Respectfully,

H. A. LENNEKER."

—*N. Y. Medical Gazette.*

ACADEMY OF NATURAL SCIENCES.

At the meeting held by the Academy of Natural Sciences on the 21st of June, Robert von Schlagintweit, Professor at the University of Giessen, in Hessen, showed some specimens of a mineral from Turkistan, in Central Asia, which he had obtained from extensive stone quarries, situate in the Barabash valley near a place called Goolbagashen, at 12,000 feet above the level of the sea. This stone, named both by the Turkistanis and the Chinese, yashem, is very highly esteemed throughout the whole of China, in Central Asia, and also in India, and is bought at a high price, although it presents a very unsightly appearance. The yashem is the nephrite of mineralogists (a silicate of magnesia); it does not occur in Europe, and except Asia, is found only in New Zealand. Some few years ago Dr. Ferdinand Keller, of Zurrich, and Dr. Uhlmann of Münchenbuchsee, have however discovered it in some Swiss lacustrine dwellings, in the midst of a mass of fragments of flints and work-tools made of flint, such as knives, axes, and arrow-heads. In ancient times the stone was supposed to possess medical qualities and was frequently used in medicine, especially for the cure of diseases of the kidneys. In 1627, Clutus, in Rostock, wrote a dissertation "Lapidis nephritici." The Yashem brought by the brothers Schlagintweit from Turkistan, is nearly related to, but not quite identical with these nephrites found in the lacustrine dwellings of Switzerland; the professor is, however, of opinion, that there exists in Asia, nephrites of the same chemical composition as is shown by the nephritic work-tools of Switzerland.

At the same meeting Prof. von Schlagintweit also gave some personal experience of the influence which great heights have on the human body. The various races of mankind seem to be subject to the influence of height in tolerably much the same degree. The disagreeable effects which a great elevation universally produces in High Asia are as follows: headache, which even attacks those persons who never otherwise suffer from it; difficulty of respiration, irritation of the lungs, which sometimes occasions even spitting of blood, want of appetite, together with muscular weakness, and a general depression and lowness of spirits. Even the strongest man is overcome by dejection, dullness, and weakness of mind and body, against which he struggles in vain. During the night the headache becomes intense, and the difficulty of breathing increases in a striking manner; moments occur when one gasps for air apparently in vain, and believes that he must inevitably be suffocated. Slight bleeding at the nose is frequent, but bleeding at the ears and eyes is not experienced in the mountains of Asia.

At great elevations in the Andes, not only are these disagreeable effects experienced that have just been mentioned as occurring in High Asia, but according to the reports of all travellers, who have traversed the higher regions of that mountainous district, there is also associated with them a number of other sufferings altogether unknown in High Asia, namely a seizure of the head and dizziness, which even amounts to loss of consciousness; further, besides bleeding at the nose, there is also bleeding of the gums and lips, and even of the edges of the eylids.

Not only does the influence of height make its appearance in a far more intense manner in the Andes than in High Asia, but the limit at which it appears is far lower there than here, for whilst in High Asia the influence of height is first remarked at 16,500 feet, (in the Alps of Europe, whose highest point, Mount Blanc, reaches only 15,784 feet, it is quite inappreciable by healthy individuals), whilst indeed as if it were a forerunner—at regions below this height, down to 11,500 feet, here and there a slight palpitation of the heart suddenly sets in, which disappears just as quickly as it had unexpectedly come on, whilst in regions lying still lower not the slightest disagreeable effect arising from the elevation above the sea, can be traced. More than one traveler in the Andes reports to us that he has already felt the effect of the height at some 10,700 feet above the sea, consequently at a height at which even under the most unfavorable conditions and circumstances of climate, it has never appeared, either in the Alps of Europe or in any other equally high mountains. The different character of the geological formation of the Andes and high Asia may perhaps account for the difference existing in these two mountain systems with respect to the effect of height, but this hypothesis is yet far from being satisfactory.

Diminished atmospheric pressure, which decreases the higher we ascend, is surely the main cause of the influence which great heights exercise on us, but other modifications of our atmosphere have also a decided share therein, such as heat and cold, the condition of rest or motion, the direction and state of the wind, the degree of moisture and dryness, the amount of cloud, the proportion of electricity and ozone, and the quantity of carbonic acid.

[The above report of the remarks of Prof. Von Schlagintweit was received too late to come in under "Reports of Societies."]

BENEVOLENCE IN MEDICINE.

An Introductory Address at the Sixth Session of Lectures at the Toland Medical College, July 1st, 1869, by J. Campbell Shorb, M. D. Professor of Physiology.

YOUNG GENTLEMEN;—Students of last year and students of this, our old friends and to-day's acquaintances, whom we trust will shortly become our friends, I bid you one and all, in the name of the Toland Medical College and its Professors, a hearty welcome to these halls, consecrated to medicine—the noblest science, the most miraculous art ever vouchsafed mankind. This welcome comes straight from the heart, and owns no other origin than friendship, a deep earnest abiding interest in your present and in your future. We are all—professors and students—laborers in the same vineyard, the same labor awaits us all, the same reward, if that labor to the end be faithfully and conscientiously discharged. Of that labor and its associate reward I propose to speak hereafter. Your professors stand *to-day* face to face with many abstruse problems, some of which they will never master, some whose solution they will only reach in dying, all as puzzling and intricate as any which will ever be presented to you.

The science of medicine in this age of the world is endowed with marvelous vitality and progress, it draws richest nourishment from all parts of the civilized earth; and fed at the hands of thousands of loving and earnest devotees, its growth and development are objects of immeasurable splendor. It leaps and bounds along the plane of the century—swift and bright as the sweep of a comet, exploding the errors of the past—dissipating present obscurities and illuminating the future; untired by time, endowed with exhaustless energies, it knows no halting place save the last station at which the finite must stop and the infinite begin. In the contemplation of this truth may be perceived the necessity for unceasing labor and study on the part of Professors and Students; on the part of all, in fact, who would keep pace with the progress and improvement of our science—or rise to distinction among the savans of the century.

If the "*ultima thule*" of our science were reached—if it were finished in all its fair proportions, the degree of labor necessary to attain this station of knowledge, language is inadequate to describe, and, once attained, the infirmities of memory are so great, that it must needs be constantly refreshed by study, or the accumulated learning of the past would insensibly disappear and finally be lost to the world forever.

In the prosecution then of the study of all unfinished sciences the relations between the teacher and the taught, between professor and student, are not and cannot be severely drawn;—they stand more on equal footing, something like older and younger brothers, the former guiding, scarcely instructing the latter, for the way after a while is full of difficulty and obscurity to all, and under such circumstances everyone is a student. No longer then are there professors and pupils, ignorance levels all such distinctions and there is in reality no difference between them.

A community of labour, an identity of interest and equality of position, should draw us very closely together, making of us a confraternity devoted to science and to each other, finding in each other sufficient reason for attachment, at least in this, that we have voluntarily and *con amore* given ourselves to a science, which, unless we are altogether abandoned, must elevate the soul and chasten the heart, teaching us reverence for Him who hath done all things wisely and well; teaching us charity for all men, sympathy for their misfortunes, patience for their transgressions, teaching us our own weakness and littleness and the awful majesty of Omnipotence, making of us all better and wiser men, practical philanthropists, working to practical ends and aims, whose grand objective is the relief of all the ills that flesh is heir to, all the mental and physical infirmities of mankind.

It is in medicine, and medicine alone, that benevolence finds a field for its fullest scope, wondrous foresight, exhaustless energies and most signal triumphs. Benevolence that leans not upon medicine or invokes her aid in the consummation of its mission is indeed a most impotent virtue.

On the face of all nature are impressed, sometimes indistinctly, sometimes in frightful perspicuity, the characters of suffering, disease and death. Take from the mead, where an emerald waving sea of luxuriant freshness proclaims the perfection of life, a single blade of grass and examine carefully the structure. A minute perforation in one portion tells the story that a destructive worm has been there; in another portion a blight or mould announces that some mysterious chemical action or physical vicissitude has commenced a series of processes whose climax is death. The leaf that flutters from the tree and falls at your feet in your rambles through the forest, is a sermon in miniature on the decay and death which fasten themselves inevitably on all organized bodies. Death is indeed one of the conditions of life. Wherever we see life, no matter in how humble or exalted way it manifests its presence, death is the inseparable associate of its continuance. In the disintegration of the blood, for instance, may be perceived an illustration of this truth. The red corpuscles, in giving to life the nourishment necessary for the perfection of its operations, are weakened and ultimately destroyed, and their inanimate remains helplessly surrender themselves to certain chemical actions, assume new relations in the system or through the various emunctories finally find an exit from the body. The moment that digestion fails to replace with new corpuscular elements those which life has used, and in using destroyed, the death, universal death ensues.

Running up the scale of creation, commencing at the point where the senses almost fail to demonstrate the existence of life, and ending in the sublimest forms of physical and intellectual powers, the same general law obtains, the germs of desire and death are there, they may remain for a time undeveloped, some intercurrent trouble may anticipate the unavoidable casualty; care may retard for a season the evolution of these germs, but sooner or latter they pronounce themselves and then the instinct of self-preservation calls aloud for help.

What was true in reference to the blade of grass or the falling leaf, is equally true in reference to man, to whom all sublunary things are subordinate; for whose use and comfort they were indeed created. There is no spot, there is no clime throughout God's universe wherein are found the habitations of man which are not darkened by distemper and desolated by death. The wail that in remote antiquity rent the startled atmosphere, when bloody assassination, done by a brother's hand, spilt the first blood, destroyed for the first time a human life, has been sounding through the centuries ever since, and the dismal, melancholy diapason will be hushed only on the consummation of the planet on which we live. Early and late, at midnight and at noon, from the four winds of heaven, from city, hamlet

and plain, from the palaces of the rich and great, and from the hovel of the wretched and the poor, comes that never ceasing cry of agony, moaning over the sick, wailing over the dying, and shrieking over the dead. In the presence then of such dreadful truths, whose universality is so perfectly established, and reflecting that medicine is the only power that can cope with nature's infirmities as manifested in the human family, who is mad or impious enough to doubt that benevolence finds in medicine a field for its most comprehensive scope. Working in harmony, medicine and benevolence present a combination whose triumphs are in the strictest sense miraculous, approaching in majesty and splendor the wonders wrought by Him, in whose presence the conscious water saw its God and blushed !

Indissolubly connected with this subject, so much so that the theme seems imperfect without it, are the genius and immortal name of Jenner. Medicine has canonized him ;—benevolence claims him as essentially her own. Run back through all the pages of history, back further yet, until the bright light of history, growing indistinct, is gradually merged in the sombre twilight of fable; ransack the records of philanthrophy, dive deeply in the musty tomes, or more modern volumes that commemorate the lives and deeds of those who loved their fellow men, and made that love in all respects practical, and you will see high above them all, shining in solitary splendor, burning, blazing in immortal light the mighty name of Jenner, and the century in which he was born, teeming with the great events as it undoubtedly was, can show none that compare with his discovery. There were dreadful wars and frightful revolutions, the demolition of monarchies and the establishment of empires; colonial rebellion, struggles for freedom and the acquisition of liberty, all of which involved the destruction of human life, and just when the century was closing, came his discovery, a bloodless, glorious triumph, a deathless victory, redeeming in some measure the past, its sole object the salvation of the human family. The most terrible scourge that has ever afflicted mankind, which in one century, and in Europe alone, destroyed 45,000,000 of lives, a distemper in itself and surroundings horrible, drying up the wells of sympathy, overwhelming the maternal instinct—so hard to weaken, almost impossible to destroy—driving the mother from her stricken child ; this is the pestilence that the genius of Jenner has robbed of all its terrors, and medicine to-day, in the exhibition of all her marvelous possessions, cannot show any prophylactic measures against the invasion of a serious malady to be at all compared with vaccination. So much can be said of Jenner's discovery ; it has given science complete, absolute mastery over one most disastrous plague, others remain bidding defiance to the science and the art of medicine, darkening the world wherever and whenever their frightful presence is made manifest. Vaccination is indeed the Sacrament of medicine, omnipotent to save, and the dreadful rumors of variolous visitations here and there over the world weaken not our reverence and love for Jenner or our faith in his discovery, they only serve to demonstrate the criminal blindness, the culpable stupidity and inexplicable negligence of mankind. Jenner idolized his discovery. In his persecutions and imminent martyrdom the reflection of what untold benefit it was ultimately to be to the human family, upheld and consoled him ; he predicted as the final result of his discovery, the entire annihilation of small-pox, and did man respond with a zeal commensurate with the importance of the measure to the necessity of faithfully following the precepts of its great author, we might all live to see the prediction realized and this most loathsome disease swept from the face of God's fair earth forever!

We have now in the second place to consider how benevolence in medicine finds a theatre for the display of that wondrous foresight, which, piercing the future with light garnered from the past, so anticipates and forestalls disaster to the human family, that nearly all the terrors and the perils of the past sink into insignificance and oblivion.

The poor old sailor who, in the prime of his manhood and the perfection of his physical strength, in days gone by, sought on a treacherous ocean for an uncertain prey whose product was to light the world, and who, after many weary months of danger returned to his native shore, a wreck of his former self, perishing with starvation and rotten with scurvy, beholds his boy depart in like pursuit, and aside from the feeling of sorrow which naturally belongs to such occasions, the old mariner feels no concern for his son's future, knowing full well that whether chasing fortune within the clutches of eternal frost, or where the sun at mid-day makes no shadow on the deck, almost as far from land as from the stars, science faithful to her trust is with him there ; and in potato and lemon offers an antidote for such vicissitudes and poisonous influences as follow closely in the wake of long continued deprivation of wholesome food, cleaning and renovating the blood, supplying it constantly with those elements that the peculiarities of the diet associated necessarily with such pursuits are almost certain to reduce below that standard essential to health. This scourge of the sea, but not alone of the sea, for in armies and besieged cities it has proved at times frightfully destructive, is gradually disappearing before the progress of science, and what one century ago was more fatal to those whose life was spent on ocean than all other diseases combined, more fatal than the battle and the tempest, the next generation of physicians may never have an opportunity to treat, may indeed never behold, so perfectly in this respect will science have succeeded in its hallowed mission. The steam driven auger which a few years since pierced the earth in Western Pennsylvania and touched a living fountain of oil, has revolutionized commerce. The land and not the sea must hereafter light the world. New Bedford sits paralyzed by the sea, the lonely whalers, those way-worn nurselings of the deep have made their last voyage; like Othello, "their occupation is gone," but before all this came to pass, when New Bedford furnished light for a large portion of the civilized earth, science had worked a miracle for those lonely wanderers, and they came in from the sea after months and years of absence, in the enjoyment of perfect health, with all their usual strength and energy unimpaired.

Again in mid-summer, or in that sultry weather which marks the close of summer and the beginning of autumn, a case of cholera is reported in one of our cities by the Eastern sea board. The telegraph flashes the dreadful intelligence from one end of the continent to the other. The cities and the larger towns hear it at once, and the press with its thousands of evangelists spreads the rumor and the most remote and inaccessible country places take alarm. They all know the course of the destroyer, it has ever been the same since history took cognizance of such events, following in the wake of civilization, in the track of the sun, in the wake of the Star of Empire whose march is ever towards the west. Instantly the process of prevention is inaugurated, young and old awake to a sense of danger and a necessity for immediate action. Putrid pools and pestilential wells are

sweetened or filled; unwholesome cellars and badly ventilated subterranean dwellings are closed at once; the marsh with its poisonous exhalations disappears; animal or vegetable matter undergoing decomposition is rapidly removed or destroyed; foul drains, defective sewers are remedied at once. Whatever science has demonstrated as instrumental in the evolution of disease, or presenting a favorable nidus for its propagation, is carefully scrutinized and effectually disposed of; habits of life improve; proper food and drink are substituted for intemperance in eating and drinking, and so completely is the pestilence checkmated at every point, that it retires discomfited from the field where it contemplated the garnering of a rich harvest, unutterable disaster to man; acknowledging in its hasty retreat the supremacy of science, the wondrous foresight of medicine and benevolence.

Is there not in the contemplation of such truths something grandly magnificent? Does it not awaken in our hearts a feeling akin to idolatry for medicine, investing it with supernatural endowments? Do we not gather here choicest inspirations, quickening us to lofty resolutions to persevere in this, the noblest of human endeavors, to make the future the peer of the past; to crush and annihilate those distempers whose malignant visitations still defy the the ingenuity of man and fill the world with mourning and desolation.

The scope and foresight of benevolence, whose auxiliary is medicine, have now been mentioned; it remains to point out some of the triumphs of medicine, remembering which, our love and veneration for the science may receive fresh increments of strength, and our resolution to raise it still higher towards the position of a finished science, solemnly formed, will grow stronger as study reveals day by day the unanswerable logic of its mighty and comprehensive beneficence.

There is no consideration more inspiring to the traveler who has undertaken a long, arduous and difficult journey, than to feel that the worst is really over, that at each step he must behold the road widen, the sky become brighter, and the surroundings of the goal at his journey's end loom into distinct visibility. Hope becomes refreshed, strength renewed, ambition restored, and in the contrast of the future with the past is tasted a stimulus for new endeavor whose miraculous results no one may measure. In reviewing the achievements of the human intellect, and reflecting upon the vast disproportion which seems to exist between finite man and his almost infinite triumphs, we are oftentime at a loss to master the mystery of that inspiration, which, carrying him through long years of unceasing toil, lifting him above the depressing influence of occasional disaster, rendering him superior to elements of opposition, mighty in degree, many in number and constantly in action; supporting him through periods of pain, perhaps persecution, places him at last securely in the possession of his prize and all the consoling considerations which cluster around the consummation of a scheme to which everything has been held subordinate, to which in a word, a life, using all its powers and spurning all its pleasures and diversions, has been most faithfully devoted. There is a mystery about this inspiration which perhaps it would prove instructive to explore. The term inspiration, here, is applied to that highly exciting influence born of physical or human agencies or considerations which acting on the intellect in harmony with it, enables man to accomplish marvelous results, results above and beyond what in the ordinary scope and reach of the human mind we are prepared to admit are possible triumphs. This inspiration, like the fountain from which it draws its life, is uncertain; it is amenable to the laws that control all purely human emotions. It may languish and sicken, it may die, it may vanish into thin air at the moment that the object to whose acquisition it spurred us on was almost within our grasp. This, unfortunately, is the inspiration upon which medicine depends; this the emotion so impressible, so facile, so fleeting, which fills the souls of her enthusiastic children; and yet it has been the power productive of results before which, pale the seven wonders of classic story, results which will never lose their interest, which will always be considered remarkable as long as the human family survive, or human life be dear and sacred, or civilization bid history keep a record of famous deeds looking to the comfort and improvement of mankind. Of course this emotion is infinitely below the inspiration which flows from a nobler and a holier source, which is, in a word, the Spirit of the Eternal using the intellect of his creatures as the instrument of divine intelligence, enabling man so to act, that perfect means will always be adapted to perfect ends; so to speak that no contamination of error mark the faultless utterance; leaving no doubt in reference to the reliability of its origin, this inspiration, like the will of Him from whom it sprang, is unerring, fixed, unchangeable, boundless, exhaustless, not measured, or weakened by time; exempt from all the accidents of mortality, it moves onward to the accomplishment of its divine purpose as strong and fresh after the lapse of a thousand years, as it was the morning of its first departure from on high.

This inspiration is awful, inexplicable, far beyond the reach of human ken. We know full well its origin, we recognize it in its fulfillment; but its mode of action and inaccessibility, its life and growth rising out of a mysterious conspiracy between the infinite and finite, between God and man, will never be made manifest to us in this world. It belongs not to medicine, science never enjoyed its omnipotent assistance; and yet there are apocalyptical splendors about the inspiration, from which spring the achievements of science that fairly startle the human understanding. This inspiration of science, of the earth earthy—the passion of an hour—the wayward offspring of lust for a knowledge of the unknown—carries its possessor onward and upward to the sublimest accomplishments. At times it seems endowed with a perfectly undestructible life; it begets a centralization of all the faculties of the soul and all the powers of the body; it begets absorption of self and entire oblivion of all extraneous considerations. In the life and tragical death of one of the high priests of science may be seen exemplified the strength of the mighty emotion. When the victorious legions of Marcellus flooded the streets of the doomed city of Syracuse, when its palaces tottered and its temples were shaken to the center; when the city which had baffled Carthage and swept from the seas the proudest armada which Athens at the zenith of her power had ever equipped, was crumbling into ruins, we behold incandescent with inspiration, the glorified person of Archimedes. Intent upon the solution of his patriotic problems, he heard not the shouts of victory, the sharp cry of crushed liberties, the crash of ruin and impending desolation, but kept tracing in the sand the diagram whose solution involved the destruction of the Invader and the liberation eternal of Syracuse from the tyranny of Rome. The sword of a Roman Soldier put an end to his patriotic reveries, and science weeps yet at the recollection of his most sacrilegious murder.

The annals of medicine furnish innumerable illustrations of the same truth, tell the same story of absorption, self sac-

rifice and devotion as touching and instructive as the melancholy history of Archimedes. Now comes the question, how is this sustained, this wonderful inspiration prolific of such miraculous results? Whence comes the freshness of its life, the ceaseless energy of its operations? Young Gentlemen the key to the solution of the whole problem is this. Inspiration is itself refreshed by triumph and inspired by success. The sight of its blossom fills it with desire to behold its fruits, and here is the secret of its continuance and the whole mystery of its measureless expansion. Born in us without our knowledge, we know not when we first experienced the consciousness of its presence; it develops with extraordinary rapidity, it spurs us on, leading us from the regions of acquired knowledge to the outposts of the unknown, where the flag of ignorance, our enemy, is still flying, and silently lays siege to its position.

This is the inspiration of medicine—this the emotion which, in its satisfaction, if the world yet survive for a time, will be crowned with results of consummate grandeur. We can imagine this inspiration standing still to-day; (I am very much afraid that in me it has assumed this quiescent and inactive condition), and looking back from the close of the 19th century upon an eventful past. Few men, few nations, few periods can look back on the past without some remorse, some persistent regret, some feeling of abasement. But the science of medicine in retrospection enjoys unalloyed satisfaction. Her course has ever been one of progress, her ways have been ways of peace, her victories except in the self-sacrifice of her children, have never cost a human life, but have saved millions from death and less serious casualities.

She beholds behind her dizzy heights of truth, mountains of fact, mighty monuments of inestimable discoveries, all the result of separate creative acts, the products of her own unaided labor, and on them all rests a light, which, like the sacred fires on Vesta's altars, will never be extinguished; which while this planet lasts will never suffer the passing temporary anguish of an eclipse.

It is in the consideration of these triumphs that the inspiration of medicine becomes delightfully refreshed; it is here she drinks mighty draughts in which she finds the miracle of her rejuvenescence perpetually sustained; it is here she finds strength for new labor, a stimulus to the accomplishment of results more grand than any which throng the brilliant annals of the past.

My hour is already far spent,—I must not trespass longer on your time and patience. Of the triumphs of Medicine I can present to you only a very imperfect glimpse.

In the beginning of my discourse, I proposed to myself to consider this subject at length, with a view of still more firmly establishing the proposition of the comprehensive grandeur and realized sublimity of Benevolence in Medicine, but on reflection and study, the subject, by a species of mirage, assumed such vast proportions, the theme seemed so exhaustless, there was such a limitless expanse of triumph, fact and discovery to explore and consider that I felt that volumes devoted to it, and not an hour's lecture, must tell the interesting and instructive story—so full of realities sweeter than romance!

In 1640, the Countess of Cinchon, the wife of the then Viceroy of Peru, returned to Spain; she brought with her a powder from the bark of a tree indigenous to the country she had just left. From the natives she had learned its value, and to Europe she told the story of its miraculous efficacy. This was the nucleus of the commencement of a revolution in medicine, this the faint foreshadowing of a triumph of our science, whose mighty control over morbid processes no pen may describe nor human voice proclaim.

Chemistry heard the rumor of the magical virtue of the bark. She carried it into her laboratories, and after many years of careful experiments, by a species of invocation which carries us back to the days of sorcery and witchcraft, she discovered an alkaloid in which were comprehended all the efficacy of the bark, and quinine took its position foremost among the mighty instruments of medicine. In the innumerable series of intermittent diseases—in fever and ague—in remittent fever and that awful form of paludal poisoning, known as pernicious or congestive fever—in all the periodic affections—neuralgia, rheumatism, dysentery, *et id genus omne*—it possesses, when scientifically administered, a controlling and curative influence perfectly miraculous.

Opium was known to remote antiquity as a stimulant to the intellectual faculties, a nepenthe for sorrow, a promoter of sleep and a specific for pain. The glory of the discovery of its use in inflammation was reserved for more modern times. In all inflammatory affections of the viscera and the tissues—we do not even except the meninges of the brain—opium is invaluable, indispensable, and the synonym "*magnum Dei donum*," proposed for it centuries ago seems to have been uttered with the inspiration of prophecy, for since that period it has in all respects been fully realized.

A word about chloroform and I finish. Some twenty years ago scientific research revealed it to the science of medicine, and its profound importance as an auxiliary to medicine and to surgery cannot be as yet definitely ascertained. Surgery in former days found, in the shock to the nervous system following upon severe operations, a most serious obstacle to its progress; chloroform has removed that obstacle and the position which surgery holds to-day, the eagerness with which it is invoked, the success it has achieved, and the painless character of its interposition, are all due to chloroform.

The student of medicine, who, in the consideration of quinine, opium and chloroform, cannot discover abundant reason for gratitude to the good God above us, nor reason for devotion to medicine, had better leave these halls; or staying, pray that the obscurity of his soul may depart, and that his heart be aroused to a sense of the majesty and beneficence of the noblest of all human sciences.

ORIGINAL COMMUNICATIONS.

ABSCESS OF THE LIVER.

BY JAMES PHILPOT WEBB, LICENTIATE OF THE ROYAL COLLEGE OF SURGEONS, EDINBURGH; POST SURGEON FORT WHIPPLE, A. T.

Suppurative hepatitis is a disease of considerable interest. The rarity of its occurrence in temperate climates affords the majority of physicians but few opportunities of studying its phenomena at the bedside.

The following particulars of a case that has fallen under my care may not be uninteresting to your readers. In this instance the liver contracted adhesions with the diaphragm and pleura, and the abscess discharged itself through the right lung.

History.—Mr. S., aged forty-three, a merchant in general business; has been on the Pacific Coast nine years, previously to which he resided in Wisconsin. He had enjoyed excellent health until about eighteen months ago, when he was attacked with dysentery. This affection had been in existence

about a month, when he felt, for the first time, pain in his shoulder, which disappeared in about eight or ten days. The dysentery, however, continued unabated, and lasted, with variable severity, for a period of eight or nine months, accompanied with occasional pain in the side and shoulder. The dysentery then left him, and he enjoyed fair health for about a month or so, when he was again troubled with the pain in the side and shoulder, and these have continued to recur occasionally to the present time. He has been more or less jaundiced, also, at different times; has suffered a good deal from dyspepsia, associated for some time back with inability to sleep on the right side.

Such has been his condition, with occasional abatement or aggravation of his illness, until about ten or twelve days ago, when his symptoms became so urgent that he applied to his medical attendant. Patient describes his symptoms at this time and subsequently to have been as follows: Acute pain in the right side, shooting upwards through the chest to the shoulder and down the arm; frequent dry, catching, painful cough; some hurry of breathing, rigors, fever and night-sweats; also, that after a few days the dry cough was exchanged for one accompanied with some expectoration.

His doctor diagnosed the case as pleuro-pneumonia.

On the morning of the 23d of March I met the doctor in consultation, and, our views of the case being different, I withdrew. In the course of the day I was again sent for, with the information that the doctor hitherto in attendance had been dismissed; whereupon I took charge of the case, and explained to the patient my idea of his sickness, as expressed in the heading of this paper.

Present Symptoms (March 23d, 1869).—Left lung healthy; the anterior and lateral parts of right lung normal; dullness on percussion at the lower and back part, with bronchial respiration and bronchophony, and some mucous râles; constant cough, accompanied with some pain, and, for some days back, with considerable expectoration of a mucous or muco-purulent character, mixed with blood; respirations are about thirty in a minute, shallow and catching; the pulse is 120, small and weak; there is pain in the right side and shoulder; tenderness on pressure over the liver, particularly when an attempt is made to press it upwards against the diaphragm, which manipulation is also resisted by rigidity of the right rectus muscle, and the ribs over the liver are bulging anteriorly, but without fluctuation or any appearance of pointing; the skin and conjunctiva are noticeably yellowish; the tongue is dry and covered with brown fur along the centre—the edges are clean; the urine, from which *the chlorides are not absent*, deposits large quantities of pink sediment, soluble by heat, and the supernatant liquid gives the reaction for biliary acids with Pettenkofer's test; patient lies on his back, sunk low in the bed, his countenance is dusky, with an indistinct but circumscribed dusky flush upon the cheeks; his mind is clear and hopeful, in which condition it remained until the hour of his death.

Progress of the Case—March 30th.—Expectoration very profuse, of a remarkable brickdust color; general condition much improved; he brings up unmixed blood now and then.

April 7th.—The expectoration increases; hæmoptysis occasionally urgent; general condition remarkably good, under the circumstances; the tongue is quite clean and moist; appetite good; bowels quite regular and the stools healthy. He expresses himself as perfectly free from pain, and feels better every way; makes water in natural quantity; urine still continues to let fall large quantities of the pink sediment.

April 14th.—Expectoration still the same in color and quantity; general condition good; bowels regular.

April 18th.—Expectoration less—same in appearance; pink sediment in urine still.

April 19th, 20th.—Diarrhœa.

April 21st.—Bowels again regular; expectoration much the same; emaciation becomes remarkable.

May 1st.—Expectoration diminishing; it varies in color from red to a dirty white; has not been doing well lately; emaciation progressive.

May 8th.—Expectoration varies in character, and grows less; general condition disimproving.

May 10th.—Diarrhœa. (This continued for about a week, in spite of treatment.)

May 16th.—Diarrhœa stopped; no expectoration for past week; he is very weak.

May 22d.—Died this day, fairly worn out by the extraordinary drain upon his system, and emaciated to the last degree.

A *post-mortem* examination was refused by the deceased's family.

Treatment.—A light and nutritious diet, consisting of beef-tea, chicken and chicken-broth, arrowroot, thickened milk and eggs—being either wholly fluid, or fluid and solid, according to the state of the system. Continued rest in bed was enjoined, and bed-sores prevented, by the application of camphorated spirits, from an early period. Hæmoptysis was controlled by the vegetable acids (gallic and tannic), or the acetate of lead with laudanum; which latter was also made available when diarrhœa occurred. As tonics having special applicability, the mineral acids—chiefly the nitro-muriatic—and when sweats occurred, the aromatic-sulphuric were prescribed, and quinine in small doses (one grain) occasionally. Carbonate of ammonia and brandy were given for some days, in the beginning, until the symptoms of prostration disappeared; brandy was again resorted to toward the end, when great debility indicated its use. Compound tincture of iodine was painted over the liver from time to time.

Remarks.—Undoubtedly *the* feature in the case was the expectoration; and it is not surprising that this discharge has arrested the attention of all observers, as unlike what occurs in any other known disease. For my part, it engaged my attention throughout. As far as I know, it is only when discharged through the air passages that pus from the liver presents any remarkable characteristics, which are due, I presume, to an intimate admixture of blood and secretion from the bronchial tubes. In this case the expectorated matter was thickish and consistent, falling *en masse* from side to side, when the vessel was shaken, with a kind of quaggy agitation. The brickdust color has already been mentioned.

From the limited medical literature within my reach I cannot find that any writer has estimated the entire quantity in a given case, though all notice its great amount in general terms. The following is based upon my own observation and actual measurements made by Mr. Babbett, of Prescott, who acted as nurse the entire time. It seems almost incredible:

During	14 days	50 pints
"	7 days	16 pints
"	7 days	12 pints
"	7 days	9 pints
"	10 days	8 pints
"	15 days	5 pints
Total	60 days	100 pints

A febrile state was present during a greater part of the time. Fever presented the characters of hectic in the be-

ginning, and of ordinary remittent in the latter part of the disease. The pink sediment continued in the urine about a month. The bulging of the ribs disappeared with the progress of the illness.

TWINS.

The following communication was handed to us by a Medical gentleman of this city, in whose practice the case occurred, May 22d, 1869.

I was called to see Mrs. Q. whom I found in labor. On examination found the head presenting, os dilating, and in a few hours (at 12 o'clock at night) she was delivered of a dead child. The child had evidently been dead about four weeks, and was at the time of its death, as near as I could judge, at the seventh month of gestation. Two hours after, (at two o'clock A. M.) she was delivered of a living child which was apparently at the eighth month of gestation; she menstruated last on the seventh of Sept. 1868, and felt motion in January. Mrs. Q. is æt. 26. On Dec. 8th, 1867, had a living child which died in a few hours; says she did not recover for some time but had completely regained her health previous to this conception.

For four weeks before confinement she had constant and severe pain in the back, and a feeling as if labor was about to commence. The pain in the back seems to have commenced about the death of the fœtus; why it had not been expelled, or its decomposed condition had not effected the growth or health of the other fœtus seemed rather singular. There were two placentæ, joined however by ramification of vessels, the placenta and cord of the dead fœtus were about in the same state of decomposition as the fœtus. The other placenta was healthy; there had been no hemorrhage previous to labor.

CORRESPONDENCE.

Boston, July, 1869.

To the Editor of the California Medical Gazette :—

The charitable medical institutions of this city are numerous, and fully commensurate with the necessities of those for whom they are intended. Of regular general hospitals there are two—the venerable "Massachusetts General," and the "City," opened in 1864. Each of these contains about 200 beds. Last year, 1,697 "house," and 7,015 "out" patients were treated at the City Hospital, and about the same number of each class at the Massachusetts General.

Then we have the Boston Dispensary, the second institution, in point of time, founded in the country, it having been incorporated in 1796. In 1868 it furnished medical treatment to 16,033 persons at the Central office, and to 9,979 at their homes; and from July, 1856, to January, 1869, 233,830 persons were treated by its medical and surgical officers.

The Massachusetts Charitable Eye and Ear Infirmary also furnishes treatment to a large number of patients. It has about forty beds, a part of which are free.

All of the institutions above named, furnish medicines to their out patients, and all of them, with the single exception of the City Hospital, were founded and are supported by private bequests, donations, and subscriptions. I believe, however, that the Eye and Ear Infirmary receives a small annual appropriation from the State.

The Carney Hospital, conducted under Roman Catholic auspices, was opened last year. The hospital building is a fine one, and is situated upon very elevated ground at South Boston.

The St. Joseph's Home, intended for sick domestics, was also opened during the last year. Patients of the class mentioned, are received at a charge of two dollars per week.

A "Childrens' Hospital" is at present in process of organization.

Besides these already mentioned, there are numerous other institutions on a smaller scale intended for special classes of the population.

No man, unless his nature be entirely destitute of the humane, can but rejoice at the liberal provision made, both here and elsewhere, for the alleviation of human wretchedness and suffering; nor would he wish those provisions curtailed in the least, so far as they meet the wants of truly necessitous cases; but that these charities are grossly abused in the drafts made upon them by persons well able to provide for themselves, is a fact which is amply verified by every-day observation. It not only encourages a certain species of vice and deception and diminishes the provision made for those truly worthy of charity, but—in this particular class of charities—inflicts a great injury upon the younger members of the medical profession, who look to this very class of the population for their practice and support during the first few years of their professional life. It is time for measures to be taken to remedy this fast growing evil.

Fractures of the femur, except those of the extreme upper part of the shaft of the bone, are now treated here, almost exclusively, by extension, applied by means of a pulley and weight, short splints to compress the muscles, sand or bran bags, and, when necessary, an external long splint rather loosely applied to prevent rotation. Comfort of the patient together with the best results are thus secured; the shortening in many cases being almost nothing.

In the City Hospital, Dr. Derby has of late been treating bad, suppurating wounds and severe burns with "carbolized" dry earth—1 part of carbolic acid to 100 of pulverized kiln dried earth—with the most satisfactory results. Carbolized dry earth and also carbolized bran prepared in the same manner, have also been used by the same gentleman for treating in cases of compound fracture with the effect of maintaining the bones in good position and obviating the offensive odor so common and objectionable in such cases.

A severe case of traumatic tetanus in Dr. Derby's service, treated by bromide of potass, is worthy of notice. The remedy was given in 40 grain doses every two hours with a favorable result, the effect of the drug upon the disease being very marked. I saw the patient but once, but at that time the peculiar physiological effect of the bromide upon the brain in producing a decided mental dullness was very apparent.

The Boston Directory for 1869, which has just been issued, contains the names of 303 physicians, members of the Massachusetts Medical Society; 40, members of the Massachusetts Homeopathic Medical Society; 11, members of the Massachusetts Eclectic Medical Society; 76, who attire themselves in female garments, and 200 "other physicians." One of this latter class delights himself in the title of "analytic physician;" another practices "naturepathy;" another goes it upon "equalizing" principle—this may be supposed to refer to pockets—another strengthens weak finances by the "Swedish Morement Cure,"—the word morement, probably indicating frequent change of residence—another is a "magnogethist," and still another is satisfied to proclaim his mer-

its, in good old plain English as a "bone setter." Many of the apothecaries also transcend the legitimate limits of their vocation and furnish advice and drugs at a slight advance upon the regular charges for the medicines furnished. The city, including the newly acquired districts of Roxbury and Dorchester-end—none of the practitioners of the healing art referred to in the above statistics reside in these districts—contains about 230,000 inhabitants. Probably one-half of this number receive gratuitous medical advice, one-half of the remainder employ Homeopathists, Eclectics, and others outside of pale of the regular profession, leaving the latter less than 200 paying persons to each Physician.

It requires no very profound study to convince anyone that this city is not a very inviting field of labor to the young practitioner; nevertheless, young gentlemen of common sense, good education, patience and perseverance, will, after the first ten years of their residence here, obtain a very satisfactory amount of business. J. B. T.

REPORTS OF SOCIETIES.

CALIFORNIA ACADEMY OF SCIENCES.

An adjourned meeting of the California Academy of Sciences was held at their rooms on Clay street, July 13th, Dr. J. G. Cooper in the Chair. The minutes of the previous meeting were read, corrected, and approved.

The ballots were then spread, and Messrs. A. T. Winn and Isaac Wormser, Consul of Wurtemburg, were elected members of the Academy.

A list of books received as donations to the library, since the last meeting, was read by the Chairman.

The applications of several persons to become members of the Academy were read and placed on file.

Dr. Behr stated that in a recent invoice of prepared insects which he had received from Acapulco, was a species of northern butterfly. The specimen was caught in a mine, back of Acapulco, at an elevation of 2,000 feet above the sea; and he thought it would be a matter of interest to know how far the northern species of butterfly went into the tropics.

Prof. Bolander then gave an interesting account of a trip which he had taken among the Sierras, and a description of Emigrant Gap and Bear Valley, in Nevada county, and the country surrounding. His theory is that the beautiful valley was once a lake; large worn bowlders and pebbles gave ample evidence of this. The appearance of the mountains showed the effects of glaciers, and he had no doubt that the cañon was produced by one of these immense fields of ice.

Mr. H. P. Carlton, who accompanied Prof. Bolander, stated that he had made a collection of shells from the mountains in the neighborhood of Cisco.

A large collection of dried plants from Oregon were then exhibited. They had been prepared with great care, and were exceedingly beautiful.

Dr. Henry Gibbons, Senior, then presented a communication from J. M. Upham, of Rio Vista, which was read. Mr. Upham stated that the remains of several Indians had been exhumed near that place. One, the body of a woman, was found buried in a sitting posture, while the men were lying on their sides, in a cramped-up position. The skull of the woman had been secured by a gentleman and brought to this city. All of the bones were gathered up by the Chinamen working at that place where they were found and burned. Mr. Upham then spoke of the reclamation of Sherman Island, consisting of thirteen or fourteen thousand acres of land, at the junction of the Sacramento and San Joaquin rivers. He said that forty-seven miles of levee, five feet in hight, had been built around the island, and that it had cost $80,000. He thought if a committee from the Academy would visit that locality, they would be able to collect much valuable information.

The members then entered into a very interesting discussion in regard to the tule lands of California, and the reclamation of them for agricultural purposes.

The meeting then adjourned.

At the regular semi-monthly meeting of this Society, held July 20th, David Hughes, Samuel Brannan, Jr., W. W. Dodge and Dr. W. H. Titcomb, were elected Resident Members. D. T. Van Orden presented some interesting specimens from Treasure City, White Pine; and Mr. Plummer of San Antonio, a section of a Puget Sound pine log containing a bullet shot into the tree and grown over many years ago. R. W. Raymond, Mining Commissioner, was present, and upon invitation addressed the Academy in continuation of the remarks which he had made upon a similar occasion a year ago, in reference to the relation sustained by the Government to the mining industry upon the public land. He declared that the doctrine of a crown-right over the precious metals, or any other mineral treasures, to be unfounded in history, law and equity; and any policy or mining system founded upon the assumption of such a right to be unwise and unsuited to the institutions of a democratic State. The gold and silver mines of the West are under the control of Government, simply because they are on the public domain; and the best thing that can be done with the mineral lands is just what is done with the agricultural lands—sell them as fast as possible to the citizens who will develop them. The effect of the present United States mining law was analytically explained, and it was shown that in its sweeping recognition of the "customs" of the mining districts, which are often whimsical and unjust, and always shifting and uncertain, the law defeats its own object. Mr. Raymond insisted that the license given to all citizens of the United States to mine freely on the public lands, ought not to be so construed as to permit claims to be held without being worked. Claims should be so recorded that they can be legally identified; and then a reasonable amount of work, and a maintenance of land marks should be absolutely required, to secure the possessory title. No title but that of the United States Patent should be considered permanent and unforfeitable. The evil results of stock speculation and swindling or foolishly mismanaged companies are insignificant, compared with the curse of speculation without capital, which infests the mining districts. At the present time, many districts have passed through the stage of speculation in the ordinary sense, and the inhabitants are begining with industry and personal attention to economy to do for themselves what formerly they waited supinely for others to do; and it is just at this point that the incubus of old mining laws makes itself most oppressively felt. No sooner does the *bona fide* miner, with perseverance and skill, in a half abandoned neighborhood, discover, develop and utilize with profit the mineral wealth of the public domain, than an old "location" is revived, and under some forgotten law, the assignee of some forgotten "locator" lays claim to the fruit to which he never even planted the seed. The mining speculations of which we hear so much complaint, do, after all,

help the development of the country. They pay out money, and when they finally explode, they leave in the mining districts good buildings and plenty of old iron. But this speculation, without capital, actually destroyes the freedom of the miner upon the public lands, and throttles industry from the beginning.

Passing to other points connected with mining industry, Mr. Raymond reiterated his conviction of the necessity of an American science of mining and metallurgy. Most men, said he, seem to think science means Germany, and books. Now we are making science on this coast every day, and throwing it away. What I want is to collect and save it. What is called "practice" is experience wasted, or selfishly kept secret. The best agency for the concentration and crystalization of our great experience in the mines, mills and furnaces of this country, would be a National School of Mines.

In conclusion, the Commisioner appealed to the members of the Academy, as men of science, to be also men of the people, to take an interest in the application of knowledge to life, and to assist by every means in their power in the solution of the economical, social, political, mechanical and other problems which vitally concern the present and future of this country.

Mr. Raymond solicits at all times from the citizens of this slope, information, suggestions, inquiries and opinions concerning any subject relating to the mining interests. Communications may be addressed to him at his office, 37 Park Row, New York. We understand that he leaves this city in a few days for a personal inspection of the mining districts of Oregon, Idaho and Montana. His report for 1868 has been published, and can probably be obtained through members of the House of Representatives. Copies of the special edition, published by a house in New York, can be obtained through any bookseller.

In private conversation, the Commissioner, who has visited already this season, Colorado, Wyoming, Utah, White Pine, Reese River, Washoe, Grass Valley, etc., expresses himself as satisfied that the bullion production will equal, if not surpass that of 1868, while the basis upon which mining enterprise stands is palpably becoming every year less fanciful and more business-like. The supreme need at present is a universal, simple and consistent law, giving sure titles, and some organized agency for both the collection and diffusion of information.

THE WOMAN QUESTION IN PHILADELPHIA.

The County Medical Society of Philadelphia is determined to stultify itself by fulminating its bulls against comets. Here is a resolution this Society adopted at a meeting, Oct. 21, 1868.

Resolved, That it is the sense of this Society that the preambles and resolutions adopted by it in regard to Female Colleges, their Professors and Graduates, are such as to disqualify such professors and graduates from becoming members of this Society; and further, that the accepting and filling of any professional chair in a Female College by a member of this Society disqualifies him for active continued membership of this body; and furthermore, that the essence and sense of the preambles and resolutions referred to, deny to the members of this Society the right to professionally consult with any Professor or Graduate of a Female College.

Not content with thus putting itself on the record as opposing a legitimate, proper, and praiseworthy extension of educational privileges, not satisfied with thus interfering in a meddlesome manner with the individual rights of its members, and setting an example of narrow-mindedness discreditable to this city, and this age, it reiterates as follows, in a meeting April 29, 1869:

WHEREAS, It is well known that some of the members of this Society are holding Professorships in the Woman's Medical College of Pennsylvania, or occupying the position of Consulting Surgeon or Physician in the Woman's Hospital of Philadelphia, or holding consultations with the Professors, Graduates, &c., of the above institutions, in violation of the rules and regulations of this Society:

AND, WHEREAS, It is believed that some of the members so offending are not aware of the passage of the resolution by this Society, at the stated meeting in October last upon this subject: therefore,

Resolved, That the Recording Secretary is hereby instructed to furnish a printed copy of the above resolution to every member of this Society, with the request that those who are holding professional intercourse with the Woman's College of Pennsylvania, or with the Woman's Hospital of Philadelphia, or with Graduates of the former, will either purge themselves of the violation of the rules and regulations of this Society, or resign their membership of the same.

What short-sighted clique controls this county society? Are they too blind to see whither the current is tending? Do they know the time of day it is on the horologe of progress? Or are they influenced by a petty jealousy, a mean fear that their own purses or positions may be injured by the admission of well-qualified women to the ranks of medical practice?—*Medical and Surgical Journal.*

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

On Friday, May 14th, (Dr. Thorowgood, President, in the chair), Dr. Morell Mackenzie gave a most interesting and instructive demonstration of the use of the Laryngoscope before this society.

After giving a short history of the first introduction of the instrument, Dr. Mackenzie proceeded to show the method of using various laryngeal instruments, mirrors, brushes, cauterisers, galvanisers, etc. He then invited the members present to see, in the cases of actual patients, examples of syphilis affecting the larnyx, and instances also of cancer, laryngeal phthisis, and one case of growths springing from the vocal cords. Each of the members was able to examine these cases and compare them with admirable drawings by Mr Lennox Brown, which were placed on the table.

The paper concluded with some practical remarks on treatment, insisting much on the importance of judicious local treatment of any ulcerations after the surface of these had been perfectly cleared. Dr. Morell Mackenzie stated that he rarely used the solution of nitrate of silver now, as he found it produced often sickness and much discomfort, which was not the case with solutions of the salts of iron and copper. The case of the man with ulcerated cancer of the larynx showed what good effect treatment can exercise even on this serious affection, there having been no attacks of serious hemorrhage since the the man came under treatment. It was mentioned incidentally that this man had applied to a general hospital in consequence of his throat symptoms, and after a period of varied treatment he was sent about his business as a "shammer." Laryngoscopic examination soon disclosed the real seat and source of the man's sufferings.—*Med. Press and Circular.*

California Medical Gazette.

SAN FRANCISCO, AUGUST, 1869.

☞ *All Letters and Communications to be addressed to the* "EDITOR CALIFORNIA MEDICAL GAZETTE, *care of A. Roman & Co., San Francisco.*"

"AMERICAN vs. EUROPEAN MEDICAL SCIENCE."

A few months ago the *New York Medical Record* contained an editorial headed as above. The writer states that as Surgeons, we are superior to our European brethren, and quotes Chassaignac as saying to Professors Gross and Pancoast, "that America, at this moment, wields the surgical sceptre of the world." The writer attributes our superiority as Surgeons, to the necessities of our pioneer life. He goes on to state that as physicians, we are as surely inferior to the Europeans, and thinks our inferiority is due to our want of preliminary education.

Professor Gross, of Philadelphia, chooses to understand the writer to imply, that we are merely superior as operators and as inventors of mechanical appliances.

The honored Professor takes umbrage at this, and writes to the editor of the *Medical Record* a letter, from which we make the following extracts:

To the Editor of the *Medical Record:*

Dear Sir:—In the editorial of your journal on the 15th instant, entitled "American vs. European Medical Science," you indulge in a criticism upon the American profession, which, whether just or unjust, is, to say the least, exceedingly severe, if not ungenerous. The impression which the article will make on our foreign brethren, both in Great Britain and on the continent, will be anything but flattering to our national pride, and will, if allowed to have its sway, tend to confirm the disparaging opinions expressed of us by Sir Dominic Corrigan and others, at the meeting of the British Medical Association at Dublin, in August, 1867.

An operation is one thing, and a very great thing, when it is properly done; but it is a much greater thing to know when it ought to be done, or, in other words, what are the conditions of the part and system which render such a procedure necessary, and what are the circumstances which will enable a man to tolerate the interference. I have always had the greatest respect for a surgeon who, when the emergencies require it, can dexterously cut off a limb, excise a tumor, or ligate an artery; but that feeling would be vastly diminished if, after the operation was over, I should find, upon careful inquiry, that the knife had been employed unnecessarily or without that judgment and regard for life which every surgeon, worthy of the name, should possess, in order to fit him for a safe professional guide. I have always maintained—and I think in this opinion every rational person will coincide with me—that it is impossible for a man to be a surgeon, in the proper and more exalted sense of that term, unless he is a good physician, thoroughly familiar with the principles and practice of the healing art, considered in its widest bearing. The number of such practitioners in this country is legion.

I take it for granted that human nature, civilized, refined and cultivated, is pretty much the same in all enlightened countries, and that professional superiority frequently exists more in the imagination than in the reality.

The American mind is the most active mind in the world; and, if the American physician is not as highly educated as English, French and German—if he does not know as much Greek and Latin, mathematics, astronomy, and the more abstruse branches of a university education—he may justly pride himself upon his superiority of common sense, of Yankee ingenuity and smartness, seldom found in the same degree in any class of citizens in the old world. This Yankee shrewdness is a necessary outgrowth of the genius of our free institutions, where every one thinks and acts for himself, and where every boy, before he is fifteen years of age, is essentially a "live" man. Our partridges often run about with a part of the shell upon their backs, and our children often kick lustily before they have fairly escaped from the secundines of the mother. In Europe, especially on the continent, every one swears by the sleeve of his master; and the consequence is that the mind of the pupil is still in a state of bondage long after he leaves the university.

American writers—young ones in particular—would rather, it seems to me, at any time—perhaps merely to display their *scholarship*—quote a foreign than an American book, although the former should be far the inferior in all the requisites of a great work. With all our independence and liberalized notions, we are still, in a very striking degree, toadies. The time has come when, as a great profession, we should do justice to ourselves, by encouraging one another in everything that is good and useful, cultivating good feeling, improving our system of medical education, rousing our schools to a stern sense of their duty, and fostering and improving our medical literature. Jealousy should be banished from among us; and every man, however humble or deficient in the scholarship of which you so much complain, should endeavor to do all he can to advance the honor and glory of his profession.

In all our American colleges medicine has ever been, and is now, the most despised of all the professions which liberally educated men are expected to enter. A few years ago an instructor in a leading university said to two young students, who were commencing their labors as medical students; "Don't study medicine; anybody can be a doctor. Study law or theology." I should be sorry to think that this statement embodied a general truth. My conviction is that the professors of our literary colleges have a high respect for the talents and learning of the medical profession. In no country in the world do physicians occupy so elevated a social position as in the United States. So far as my experience extends, this feeling is universal, not peculiar to any particular section, town, or city. In refinement, in general culture, in force of intellect, and in scientific attainment, they have not, I am bold to say it, their superiors in either of the other professions; while in benevolence, in charitable acts, and in scientific research they are far in advance of them.

"Study law or theology," says this sage instructor. And what if you do? Are lawyers and divines, as a body, more refined, learned, moral, or wise than medical men? If they are, it would require a long search, even with the aid of a

much larger lantern than Diogenes employed, to find a man, to furnish the proof. There are, and always must be, uneducated, coarse, ignorant men in every profession,. It could not from the very nature of things be otherwise ; and what is true of this country is true, to a greater or less extent, of every country under heaven. "Anybody can be a doctor!" Nothing is more true ; but it is also true that anybody can be a lawyer or a preacher.

Like youself, I sigh for the coming of a golden age for our honored and beloved profession. I may not witness its advent, but assuredly the time will come when America will wield the medical sceptre of the world, as she now does, in the opinion of Chassaignac, yourself, and many others, that of surgery.

Hundreds of young men, good and true, thoroughly educated, eminently scientific, abounding in industry, fidelity and ambition, are, like so many bees, busy at work in every town and city in this great country, collecting honey from every flower and throwing it into the great storehouse of the profession. Never was there such industry, such talent, such genius, such patient labor as there is at the present moment among the medical men of the Western World.

The Milk of the Sow. — *The Medical and Surgical Reporter* states that, of all milks, that of the sow is the richest and most nutritious. That it contains 50 per cent. more of solid constituents, than does the milk of the cow; and is of the opinion that the difficulty of securing specimens is the principal reason for the milk of the sow being generally absent from the lists of milk analysis.

We are inclined to believe that its absence is due to the fact, that the milk is not likely to be of any practical service to the human family, as no mother could be induced to make a pig of her little darling, or would any Doctor care to increase the number of hogs among his patients.

The Journal of the Gynæcological Society of Boston, edited by Drs. Winslow Lewis, H. R. Storer, and G. H. Bixly, published by James Campbell, Boston, Massachusetts, Monthly, $3.00 a year, Vol. 1, No. 1.

This new journal of a new society appears in the arena armed alike for science or for fray. This first number is exceedingly interesting and contains excellent articles by Drs. Field, Storer and Grover.

A. Roman & Co., and H. H. Bancroft & Co., are the agents for this coast, and we earnestly hope that our subscribers will give it their support.

SURGERY.

A CASE IN WHICH TWO LOOSE CARTILAGES WERE REMOVED BY SEPARATE OPERATIONS FROM THE LEFT KNEE-JOINT OF THE SAME INDIVIDUAL. RECOVERY, WITHOUT AN UNFAVORABLE SYMPTOM.

By Holmes Coote, F.R.C.S. Surgeon to St. Bartholomew's Hospital.

On the 20th of March, I met by appointment Mr. Worship, of Riverhead, to operate on a patient of his, who was suffering from the presence of a loose cartilage in the left knee-joint. As we proceeded to the residence of the patient, Mr. Worship inquired of me whether I had ever met with a case in which two co-existing loose cartilages had been observed in the articulation of the knee. I replied in the negative, although I knew no reason against the possibility of such an occurrence. I had seen numerous loose bodies in the hip-joint of an aged female, who had died after many years' suffering from rheumatic arthritis; and I have since found out that which I did not at the time remember—namely, that Morgagni had related the particulars of a case in which after death, twenty-five of those bodies were found in the knee-joint of a woman who died of apoplexy. I noticed however, that some doubt still remained in Mr. Worship's mind whether there were one or more than one in the knee of the patient in question.

On arriving at the house, I found the patient to be a tall, well-made young man of seventeen years of age. The usual symptoms were present, so that he feared to take any active exercise. The patient, having been put on a couch, the loose cartilage was soon found near the inner condyle; but in a moment, owing to some slight movement of the limb, it disappeared. After a short manipulation, we found one on the outer side of the joint—which we both, I believe, regarded as the same one first felt, having only shifted its position from one side to the other. I at once transfixed it with a long, sharp, and strong needle. The patient then, at his own desire, inhaled chloroform, and became insensible. I made a longitudinal incision down to the synovial membrane over the cartilage, and, raising the latter on the end of the needle, pushed it outwards. A very limited incision through the synovial membrane, allowed me to push the cartilage out of the joint. The needle was then removed, and the wound at once closed by three metallic sutures, by strips of plaster, and by a thick layer of collodion. Mr. Worship put the limb on a back-iron splint, and suspended it to a cradle—such as is in common use at St. Bartholomew's Hospital. The limb was not disturbed for a week, and Mr. Worship informed me that in seven days the wound was closed.

Soon after rising from his bed this gentleman discovered, to his great disappointment, that there was a second loose cartilage in the same knee. Indeed, there was every reason to believe that the cartilage first felt on the inside of the joint was the same as that which now remained, and produced the usual feeling of pain and discomfort.

I met Mr. Worship at Riverhead on April 13th, but we failed to find the cartilage after the most protracted examination. The patient ascribed the failure to the fact of his having kept his bed for the last three days, when, as he said, the cartilage got into some space whence it could not be shaken. On the 17th I again went down by appointment, when the cartilage was found, transfixed by the needle, and removed in precisely the same manner as the former. The after-treatment differed in no respect; no unfavorable symptom supervened, and the gentleman is now well.

The cartilage first extracted was thin and oval, and equaled in circumference the last joint of a man's thumb. That removed by the second operation was smaller than the other, concave on one side and convex on the other.

The case here related is in many respects worthy of consideration. In the first place, it offers some evidence to prove that loose cartilages within the joints have more than one manner of formation. I will allude to the wild idea that they may be formed of a "solidified precipitate from the

synovia." Such an hypothesis speaks for itself, and is its own condemnation. These bodies are for the most part formed on the synovial fringes, where they are nourished, and they grow until detached by accidental movements of the limb. They consist of fibro-cartilage and of earthy concretions, but not of true bone. Nor do they seem to me to increase in size after having been once fairly detached. On the contrary, I fancy I have observed that in the older cases they become sunken, yellow, and opaque. The penduncle of attachment is soon obliterated. But the second fibro-cartilage seemed to me, from its shape and general appearance, to have been a portion of hypertrophied articular cartilage—as if it had been an outgrowth from the margin of the articular cartilage covering the extremity of the femur, and had by some accident been detached or chipped off.

Whatever may be the explanation, the case is worthy of notice in its practical bearing as to the possibility of there being two loose cartilages in the same joint—a fact impossible to determine, except upon the supposition that the patient or the surgeon may have had the luck to find them both within the grasp of his hand at the same moment.

Much has been written on the mode of removing these loose cartilages. The dangers attending a penetrating wound of a joint are well known; and of all joints, that of the knee, being the largest, gives us the greatest cause of anxiety. Hence we hear of valvular incisions, of subcutaneous sections, &c., that the risk of admitting air into the joint may be avoided.

The removal of the loose cartilage by a long sub-cutaneous incision, as practised by Mr. Square, has the advantages attending all sub-cutaneous operations; but it is not quite so easy of accomplishment, nor can it be so promptly performed as the operation by direct incision. The only troublesome consequence which I have known to supervene has been a low form of inflammation in the subcutaneous areolar tissue, followed by repeated attacks of ulceration of the skin.

The mode of operating which I adopted in this case, and have repeated in other instances, effects the removal of the loose cartilage without any interference with the interior of the joint; while the immediate closure of the wound puts the divided parts into that condition most favorable for recovery. Seven days sufficed for perfect union.

Among many surgeons the free employment of antiseptics, both during and after operations, finds much favor at the present day; and in this very operation now under consideration, Mr. Lister advocates the use of the carbolic-acid oil (one part in six). Contrary to the view thus entertained, I believe that in cases of blood-poisoning the septic material enters the system, not from the secretions of the wound, but by means of the infected atmosphere, and through the lungs. Hence I reserve antiseptic agents for cases in which some manifest unpleasant odor has to be corrected. In a case related by Mr. Lister, in the *Glasgow Medical Journal*, November, 1868, and, treated upon the antiseptic method, the operation of removing a loose cartilage from the knee was performed on July 2d, and the patient pronounced well on the 12th—a period of ten days. In the case related by me, in each operation union was complete in a period of seven days.

Finally I believe that whenever we have to deal with a case in which two loose cartilages are contained in one joint, it is better, unless both be in close contact, to remove them by separate operations, than to make two openings consecutively on opposite sides of the limb.—*Lancet and Dom. Med. Journal.*

EFFECTS OF AN ADHERENT PREPUCE ON THE URINARY ORGANS.

The *Medical Times and Gazette* says: "It cannot be too much kept in mind, said Mr. Bryant the other day to his class, that an adherent prepuce by itself is capable of producing symptoms of difficult micturition, incontinence of urine, hæmaturia, and, indeed, any other symptom of urinary disease; for it seems that every source of irritation at the renal end or the external end of the urinary passage is referred to the bladder, or rather shows itself in the most marked degree in that viscus. In any case, consequently, of supposed stone in the bladder of a child, the penis should be well examined, for in a large number of cases the symptoms of stone will be found to be caused by an adherent or elongated prepuce."—*St. Louis Med. Reporter.*

NEW YORK PATHOLOGICAL SOCIETY.

DISCHARGE OF ODONTOID PROCESS THROUGH A POSTPHARYNGEAL ABSCESS.

Dr. Sayre, in that connection, referred to a most extraordinary specimen of fracture of the odontoid process that he had seen that morning, shown him by Dr. Bayard, of New Brunswick. Two years ago a child had fallen from a height and struck upon the back of the head. Paralysis of the upper and lower extremities occurred, and the head fell sideways upon the left shoulder. The paralysis and position of the head continued for a number of weeks, the former, however, gradually improving, when Dr. Bayard was called to see the case. He straightened the head somewhat by a suitable apparatus. The patient at the end of some months, recovered sufficiently to be able to walk about. At the end of a year after the injury the child began to suffer a good deal from a cough, and an abscess appeared at the posterior part of the pharynx. In an attempt to open this abscess it had burst and discharged the odontoid process, which had been fractured at its base. Dr. Sayre had seen the specimen and was satisfied that there was no mistake concerning it. The child subsequently entirely recovered.

Dr. Post referred to a case of a Long Island farmer who had fractured one or two of the cervical vertebræ by falling from a hay-mow and striking on the back part of the head. Paralysis of the upper and lower extremities had continued more or less for a period of four years, when the patient recovered sufficiently to get about and attend to his business. The parts had become consolidated soon after the injury, which allowed of the favorable termination of the case.

MORBUS COXARIUS.

Dr. Hamilton presented a specimen of diseased hip-joint removed by operation from a child eight years old, on the 20th of May. The patient had received an injury early in life, from which no permanent ill effects had been observable. Three years ago it had received a second injury of the hip, following which the usual signs of morbus coxarius showed themselves in due course, viz., contraction of the lower limb, sinuses communicating with dead bone, etc. The general condition of the patient was, however, measurably good, and Dr. H. deemed it proper to perform exsection. After the removal of the part there was no great destruction of the dead bone or other portion in the neighborhood. The retrograde metamorphosis had removed the synovial membrane and cartilage of incrustation. The acetabular cavity was almost entirely free from disease. The specimen was not remarkable in itself, but he presented it for the sake of making the suggestion that a committee of three be ap-

pointed to examine impartially into the merits of the exsection of the hip, knee, and other joints, and report the results of their labors, at the end of six months, to the Society. The appointment of this committee was, on motion, made a special order of business for the executive session.—*Dominion Med. Journal.*

PRACTICE OF MEDICINE.

MINNESOTA FOR PULMONARY DISEASES.

Mr. Editor:—Much has appeared in all kinds of periodicals of the beneficial effects of our climate on consumptives, which is so far from being the case, that I am tempted to give you a brief letter setting forth the *facts*, and let you and your readers judge for yourselves.

Our great elevation above sea-level, the amount of ozone we possess, and the many topographical advantages and peculiarities are admitted; but whatever brilliant anticipations are excited by the theory, in the practice they are found delusive, and the result anything but what the throng of health-seekers look for. It does not seem to me that a country in which the mercury in the thermometer ranges from 104° above zero, to 40° *below*, is just the place for phthisis; or rather, it is just the place for it, but not for its *cure*. Our winters are six months long, and rarely is the mercury higher than "freezing." In the winter of 1867-8, it was most of the time 20° below zero.

So many patients come to us from Eastern physicians, only to die in a short time, that many of us have about come to the conclusion, that when you in the East get unusually unpromising patients that you want to get off your hands, you send them to Minnesota. Some few are benefited, even restored to health, but they are terribly in the minority. Perhaps they would have just as surely recovered health in the East. I have often remarked that a change of scene, if only of forty miles, from hill to plain, or *vice versa*, benefits a consumptive just as much as a journey of 1,500 miles. I am in attendance on a family now, whose history is a very sad one. The father, an old decrepit man, on the representation of his son, who *has* been benefited by our climate, sold the old homestead in New York, in which he was born, and for the sake of his two daughters, who were *threatened* with consumption, moved to this city; and, after all his sacrifices, has witnessed the death of one daughter, and now sees his remaining one in the last stages of that terrible scourge. All this in six months! They were not considered dangerously ill at home and came here to avert the danger, and coming only hastened its development.

The immediate accompaniment of death seems to be a peculiar diarrhœa. The stools are just one or two hard balls of dark colored fæces, the passage of which is attended with terrible pain in the back and at the anus, followed by a gush of fluid stool with a faint, sickening sensation, then a little blood; this is followed by a period of rest, varying in time from a half an hour to one or two hours. This comes on about a week before death, and in every case I have seen, acts precisely alike.

The water we have here is saturated with magnesia, and *that* may account for the diarrhœa. I have never been able to check this, or produce any effect upon it by any of the remedies I have ever used.

Let me bring this rambling letter to a close by asking our Eastern brethren to think twice before they load our case-books (in the language of insurance men) with "bad risks." Keep them at home! they will almost surely die; let them die among their friends. The journey, and the severe weather they are certain to experience, will almost certainly hasten comparatively slight cases to a fatal termination.—*Med. Investigator.*

Owatonna, Minn. J. G. Gilchrist.

DIABETES.

(*Condensed from the Lancet.*)

M. Bouchardat holds that starchy compounds are converted into dextrine and glucose, in the alimentary canal through the agency of the pancreatic juice; that they are then transmitted to the liver, which acts as a moderator, and gradually poured into the blood, where the action of pancreatic ferment on the dextrine is completed. In health, no more glucose is present than can be retained in the vessels and oxidised by normal respiration; as soon as this amount is surpassed, however, exosmosis of the glucose occurs, and it appears in the urine. Excess of glucose in the blood may arise from over-production in a given time; or, the production being normal, there may be deficient destruction or oxidation. Both of these conditions are usually present. Over-production is caused, not only by too great indulgence in amylaceous food, but by rapid and excessive conversion of this into glucose, due partly to hyper-secretion of the pancreatic juice, partly to an extraordinary activity of the ferment contained in this juice, and partly to a perversion of the gastric secretion, whereby a similar power of converting starch into sugar is exerted. Incomplete oxidation of the glucose normally present may result from:—1. Insufficient exercise, sedentary occupations, especially when conjoined with a highly farinaceous diet, being, according to the author, among the most potent predisposing causes of diabetes. 2. Strong mental disturbance, whether of a depressing or of an exciting character; the influence of sexual excess being included under this head. He has rarely seen diabetes accompanying hemiplegia or paraplegia; but has frequently met with it in complication with gout and rheumatism, as the result of surcharge of the system with calorifacient material, while the presence of an excess of uric acid interferes with adequate oxidation of the glucose. Insufficient oxidation also accounts for the occurrence of diabetes after exposure to cold, or as a complication in phthisis, bronchitis or asthma. M. Bouchardat finds no reason to consider diabetes transmissible from parent to offspring; but has often noticed it in brothers, owing perhaps, to a predisposition common to both, perhaps to similar habits, diet, etc. He is not disposed to assign any influence to climatic conditions, except that the symptoms are aggravated by exposure to cold and damp. Notwithstanding that sugar is found in the urine of all puerperal and nursing women, and in one half of those that are pregnant, diabetes is remarkably rare in females; when it does exist, however, conception seldom, if ever, occurs. The rarety of the disease in infants is attributed to the activity of their respiration. Finally, he notices that whilst those pursuing regular out-door avocations seldom suffer from diabetes, the disease is especially liable to occur in all those who, putting forth great mental exertion and leading a sedentary life, are yet in easy circumstances, keep a good table, and eat largely, rapidly, and without due mastication. To so great an extent does this hold, that he believes, out of twenty men from forty to sixty-years of age, belonging to the legislative assemblies or to learned societies, or who occupy distinguished positions in commerce or in finance, or even in the army, *one* is sure to contain sugar in his urine.—*Medical Gazette, N. Y.*

THERAPEUTICS.

CHEMISTRY OF THE CINCHONA BARKS.

(CINCHO-QUININE.)

The chemical manipulation of the Cinchona or Peruvian barks, reveals the presence in them of quite a number of most remarkable, complex bodies. No vegetable production, except the poppy, affords such a marvellous combination of valuable medicinal principles as the *loxa* and *calisaya* barks, and no substances have been studied with greater care or more intense interest by chemists. Nothing short of the subtle chemical forces controlled by the Infinite One, could construct from the elements of the earth and air, a bitter principle like quinia, or those other agents associated in bark, so closely allied to it physically and chemically. A handful of the finely comminuted fibres of the yellow bark, which resemble physically a dozen other varieties, is made to yield by the chemist, when treated with aqueous and alcoholic liquids and acids, a dark, bitter solution, unattractive in taste and appearance. If the process is skillfully conducted, or exhaustive in its results, there remains, beside the solution, a portion of woody fibre, inert and almost tasteless. It holds considerable coloring and some waxy matter, together with a little tannin; but the active chemical or medicinal principles have been removed, and are held in the dark liquid. The exhausted bark is not entirely worthless, for it may be dried and used as fuel. But what of the dark liquid? From this the chemist obtains, beside other substances, a portion of beautiful, white, silky crystals; not wholly of one distinct kind, but of several, all of which possess about equal chemical and therapeutical importance. No wonder it seems, to the uninitiated in chemical manipulation, a difficult work to perform. It is, however, quite easy to the thoroughly instructed. The first principle isolated may be the quinia. This is not held in the bark in its naked alkaloidal condition, but locked up, in the form of a salt, with another principle called *kinic acid.* In the bark it is *kinate of quinine.* We isolate the quinia, tear it from its embrace with kinic acid, throw that away, force it into a kind of matrimonial alliance with sulphuric acid, and in this condition of *sulphate of quinia,* use it as a medicine. This kinic acid marries into several other families resident in the bark, prominent among which are *cinchonia, cinchonidia, quinidia,* etc. Precisely how many of these alkaloidal principles the different kinds of barks contain, is unknown; but it is safe to assume that there are as many as four others which, although not distinctly pointed out, are tolerably well recognized. These *kinates* are all *kindred* in nature, and all labor to the same end, when isolated and set to work as therapeutical agents in the human system.

In one hundred ounces of good yellow bark, we obtain about two and three-fourths ounces of quinia, and two ounces of cinchona, with variable amounts of the other principles, but less than the two named. It is to be regretted that we cannot remove the different families of kinates from the bark in their natural state of saline combination. It seems reasonable to suppose their action upon the system would be more salutary than in other forms. It is easy to isolate the kinic acid, and having the alkaloids, the kinates of quinia, cinchona, etc, can be reformed; but in these chemical changes so much disturbance to natural organic combinations is made, that, practically, we realize no marked advantages. It seems unnatural to force a natural alkaloidal base out of its association with an organic acid, and recombine it with a mineral acid. This we do in the preparation of the sulphate of quinia. However as it has served so good a purpose for many years, it is not best to quarrel with the theory.

All the alkaloids of bark possess about equal febrifuge and tonic properties, when isolated and administered in that condition. This has been proved over and over again by all competent chemists and physicians, from Drs. Gomez, Duncan, Pelletier, Caventou, down to the time of Liebig's researches, a quarter of a century ago, and from that time to the present by a hundred careful chemical and medical observers.

How the one alkaloid, quinia, came to supersede the others, and drive them into the background, is easily understood, when we remember that it was about the first that was distinctly eliminated, studied, and experimented with; and the *eclat* it acquired caused everything else to be neglected. The natural bark, holding all the alkaloids, the quinia, cinchonia, quinidia, etc., has always been observed to produce more efficient and prompt results, both as a tonic and febrifuge, than the quinia or either of the other principles in themselves; but holding also, as it does, tannin, gum, starch, fibrine, and coloring matter, all of which are medicinally interfering or inert, its use is rendered inconvenient and inadmissible in many cases. Beside, it is apt to produce disturbance of the gastric functions of an unpleasant character. Acting upon the idea that the natural alkaloidal principles of bark, in their simple, unchanged condition, separated from the gross, woody, and other matters, would better subserve all therapeutical ends than the barks themselves, or *any one* of the alkaloids separately employed, we have prepared CINCHO-QUININE.

Cincho-quinine contains no external agents, as sugar, licorice, starch, magnesia, etc. *It is wholly composed of the bark alkaloids.* 1st, quinia; 2d, cinchona; 3d, quinidia; 4th, cinchonidia; 5th, other alkaloidal principles present in barks, which have not been distinctly isolated, and the precise nature of which are not well understood. In the beautiful white amorphous scales of cincho-quinine, the whole of the active febrifuge and tonic principles of the cinchona barks are secured without the inert, bulky lignin, gum, etc. It is believed to have these advantages over sulphate of quinine:

1st. It exerts the full therapeutic influence of sulphate of quinine, in the same doses, without oppressing the stomach, or creating nausea. It does not produce cerebral distress as sulphate of quinine is apt to do, and in the large number of cases in which it has been tried, it has been found to produce much less constitutional disturbance.

2d. *It has the great advantage of being nearly tasteless.* The bitter is very slight, and not unpleasant to the most sensitive, delicate woman or child.

3d. It is less costly than sulphate of quinine. Like the sulphate of quinine, the price will fluctuate with the rise and fall of barks, but we shall supply it at all times at less than the lowest market price of that salt.

4th. It meets indications not met by that salt.

Cincho-quinine admits of several pleasant forms of administration. We present the following

FORMULÆ, AND METHODS OF USING CINCHO-QUININE.

A perfectly clear solution of *cincho-quinine* may be made by taking 10 grains, rubbing it fine in a mortar, and gradually adding 2 fluid ozs. of water, in which is dissolved 30 drops of No. 8 acetic acid, or 6 drops of sulphuric acid. The solution is not disagreeably bitter, and a pleasant Elixir may be made from the solution, by adding syrup and aromatic flavors.

CINCHO-QUININE PILLS.

R Cincho-Quinine (finely powdered) xx gr.
Acid Sulph. Aromat. (Elix. Vit.) xx gtts.
Fiat pil. xx.

Mix, and rub in mortar until it becomes hard enough to form into pills. The mixture is at first quite liquid, but soon it hardens, and pills can be readily formed from the mass. This is the preferable form in which to administer the remedy, as the pills are small and can be readily taken. They need no *sugar coating* to render them palatable.

CINCHO-QUININE ELIXIR.

R Cincho-Quinine (finely powdered) grs. xlviii.
Aqua Rosæ (fresh) . . . . dr. viii.
Syrupus Simplex . . . . dr. iv.
Tinct. Cardamon - . . . dr. ii.

Mix. Dose as tonic, a desert spoonful three times in the twenty-four hours. The Elixir should always be shaken before it is administered.

CINCHO-QUININE POWDERS.

R Cincho-quinine . . . . . dr. i.
Sacch. Alba, (powdered) . . dr. iv.

Rub together in mortar and divide into powders of any size desired.

When cincho-quinine is required to be given in large doses, as in intermittents, the Pill form is preferable, as the pills can be made into those containing five grains, and not be inconveniently large.

There are many other ways in which it may be prescribed, which will suggest themselves to the physician.

It is doubtful if it can be placed in a form suited to hypodermic use. But few experiments have, however, been made in this direction.

In intermittents, cincho-quinine may be given in 5, 10, 20, or even 30 grain doses, the same as sulphate of quinine. As an introduction to the treatment of fever and ague with cincho-quinine, an ipecac, or other emetic, is often of the greatest service. Ten or twenty grains of cincho-quinine, or of sulphate of quinine, might as well, as far as medical effect is concerned, be dissolved in the contents of a waste bucket, as in a stomach loaded with food and the attendant juices. The remedy must act upon the walls of the stomach and the connecting organs, to produce the constitutional effects.

In a recent visit to the wards of the United State Marine Hospital, Chelsea, Dr. Graves, the physician in charge, politely invited us to thoroughly examine the numerous intermittent patients, with reference to his treatment of this disease, it being based upon the use of emetics prior to administering the bark preparations. We believe the wards of no hospital in the world can show more cases of prompt and thorough recovery from the affection than this. It is not probable that the marked beneficial influence of the emetic is due alone to its work as an evacuator, but its general influence on the system admirably prepares it for the use of anti-periodics.—*Boston Journal of Chemistry.*

ON ELIXIR OF CALISAYA, IRON AND BISMUTH.

EDITOR JOURNAL OF PHARMACY:

DEAR SIR,—As an unofficinal preparation, known as "Elixir Calisaya, Iron and Bismuth," has acquired considerable reputation, and is being commonly used in various parts of the country, and having seen no reliable formula published in any of our leading pharmaceutical journals, I would most respectfully submit my process, which I have for years employed, and which furnishes a permanent and reliable preparation, containing just proportions of each active ingredient, free from any disagreeable quality, and the bismuth of which does not conceive such an affection for the bottom of the bottle, that it fails to remain in solution.

Take of Phosphate of Iron scales, one troy ounce,
Citrate Bismuth, one troy ounce,
Sulphate Quinine, twenty-four grains,
Citric Acid, eight grains,
Carbonate Magnesia, one drachm,
Sugar, half a troy ounce,
Water of Ammonia, sufficient,
Oil Orange, best, half a fluid drachm,
Oil Lemon, fifteen minims,
Oil Caraway, five minims,
Oil Nutmegs, five minims,
Alcohol, eight fluid ounces,
Syrup, twenty fluid ounces,
Water, sufficient.

Rub the oils with the sugar and magnesia, gradually adding one pint of water, and filter. Put it into a half-gallon bottle and add the syrup.

Dissolve the pyrophosphate iron in two fluid ounces water, and add to the mixture.

Now add seven fluid ounces of alcohol.

Put the quinine, citric acid, one fluid ounce of water, and the balance (one ounce) of the alcohol in a capsule; heat over a spirit lamp until dissolved, and mix with the other ingredients.

Rub the citrate bismuth with one ounce water, and carefully add sufficient water of ammonia to effect the solution. Mix with the other ingredients.

Add water of ammonia until neutral to litmus paper (avoiding excess), and finally as much water as will bring the whole to the measure of sixty fluid ounces, and filter. To be kept and dispensed in dark bottles.

One fluid ounce contains about eight grains ammonia-citrate bismuth, eight grains pyrophosphate iron, and the equivalent in quinine of sixteen grains of calisaya bark.

The following is the process I have employed for making citrate bismuth: First,

Take of pure sub-nitrate Bismuth, two troy ounces,
Nitric Acid (sp. gr. 1.44), 1450 grains,
Water, sufficient.

Put the bismuth in a porcelain dish; add the acid, and heat over a spirit lamp until the bismuth is dissolved; then add one fluid ounce water, and let stand until cold; then gradually add water, constantly stirring with a glass rod, until a further addition produces milkiness, or until the whole measures one and a half pints. Filter and set aside.

Next:

Take of Carbonate Soda crystals, sufficient quantity,
Citric Acid, three troy ounces,
Water, one and a half pints.

Dissolve the citric acid in the water and add sufficient carbonate of soda (previously dissolved in water) to exactly neutralize the acid. It is important that there shall be no excess of soda, as the resulting citrate bismuth would be contaminated with the oxide after decomposition.

Put the bismuth solution in a suitable vessel, and add, stirring constantly with a glass rod, sufficient of the solution citrate soda exactly to decompose; the precise quantity is known to have been added, when, after placing the whole upon a cloth filter, the washings, after having been suffered to run a while until clear, *first* fail to precipitate bismuth when dropped into water, and *second* show no precipitate

upon the addition of a few drops of ter-nitrate bismuth, a small quantity of which should be reserved for this purpose. When the liquid portion has mostly passed, pour water upon the filter until thoroughly washed from nitrate soda, or until the water passes tasteless; then, after draining, transfer to bibulous paper, and dry by gentle heat.

Respectfully, ROBERT W. GARDNER.

[*From Am. Jour. Pharmacy.*]

VESICLE ABSORPTION.

A correspondent of the *British Medical Journal*, in a communication to that paper, remarks:

"That the bladder is able, under special circumstances, to absorb the water from the urine contained in it, I have no doubt, from an observation made in my own person. Some years ago, I started one morning for a walk of many miles along the sea-coast, and when near my destination I was about to stop to pass urine, when I discovered to my consternation that my progress farther was arrested by the jutting rocks. My attention was immediately diverted to my novel position, and for some time I was engaged in various schemes for my extrication. As none were feasible, I was forced to remain an exile on the shore until the morrow allowed me to retrace my steps. It was nearly midnight when I suddenly reccollected that I had been arrested almost in the act of micturition, and I thereupon emptied my bladder, but it was more from the idea of fulfilling a forgotten engagement than from necessity. My surprise was then great when I remarked that the quantity of urine was small, as I was sure, from my own feelings, that the bladder had some hours before been full. The physiological fact of absorption of the urine, or, at least, of its aqueous portion, forced itself upon my conviction, and I have not the slightest doubt that this did take place. I should state that, having no food, my hunger was great, and my thirst painfully distressing; now, if the sense of thirst be due to the want of water in the system, its requirements were considerable in my case. Of course, I cannot prove to demonstration what amount of urine my bladder held at three o'clock, and what amount at eleven, but I know that the quantity was small at the latter time, and at the former my desire to micturate was as usual after having had no relief since the early morning. I believe also, that I was the subject of another interesting physiological experiment: that my thirst was subsequently much alleviated by absorption of water from my wet clothes."

The editor of the *Journal*, commenting on this statement, says:

"This subject is of much therapeutical as well as clinical interest, and especially in relation to morphia injections into the bladder in cystitis. Very different conclusions have been published as to the therapeutical effect of these injections. Dr. Braxton Hicks has found them useful; Sir Henry Thompson, useless. In a *resume* in the *Gazette des Hopitaux*, March 7th, 1868, M. Segalas is described as admitting the absorption, as proved by experiments on animals; M. Demarquay, as finding it very feeble; MM. Russ and Susini, as denying it altogether, from experiments on healthy men. M. Edward Alling reports, in the *Bulletin General de Therapeutique*, six cases in which morphia injections, given in rebellious and severe cases, afforded great relief. Like Dr. Hicks, who has found them useful, he recommends full doses of the morphia; and he dissolves the salt in even a smaller quantity of water —thirty to forty drops of a solution, of which each drop contains two *milligrammes* of the salt."—*N. Y. Medical Journal.*

OBSTETRICS AND GYNÆCOLOGY.

EPISIORAPHIA.

Dr. E. R. Hutchins, in a letter from Philadelphia to the *Chicago Medical Journal*, says: "I have to relate three cases of procidentia and prolapse of the uterus, all of which were completely cured by the operation, known (only in books), under the term episioraphia."

"The operation consists in removing a portion of the vaginal mucous membrane with scissors or bistoury, and then bringing the edges together with the quilled sutures, thus making the extent of vaginal opening as much less as the amount removed. A prolapsed uterus by no means is dependent on the laxity and elongation of the ligaments. While these ligaments *aid* in maintaining the uterus in proper position, the *walls of the vagina* perform this function especially.

Prolapse, either in greater or less degree, *must* result from an uterus largely hypertrophied, and of course increased in weight as well as in size. And in very many cases, as soon as the inflammation and hypertrophy are cured, the prolapse also is cured. But if this does *not* remedy the evil, we must have recourse to this operation. Within the past few months three cases have come under my observation and treatment. The first is that of Mrs. B. age 37, mother of three children. Has been a resident of St. Louis. When first called to her I found two-thirds of the womb outside of the os externum vaginæ. Thus she had been since the birth of her last child, three years ago. The bowels were costive constantly, and the irritation of the bladder was almost unbearable.

The second case is that of Mrs. G, age 31, mother of five children. Has led a life of care and trouble, compelled by poverty to labor constantly. On examination I found *more* than two-thirds of the uterus to be external to the mouth of the vagina, and the former mucous membrane covering the uterus and vagina changed to true skin. Bowels costive and constant dribbling of urine. She had suffered in this way for nearly five years.

The last case is that of Mrs. L. age 43, a woman of rather easy virtue, to say the least. Ceased menstruating two years ago. *Has had three abortions produced on her.* On examination of this case I found the uterus just down to the opening of the vagina, while both the anterior and posterior walls of the former protruded about two inches, causing much soreness and frequent desire to urinate.

In all of these cases, as the only means of sure relief, the operation of sewing up the perineum was performed. In every case the success was perfect. In the first one, that of Mrs. B. I had some difficulty in my *after treatment*, occasioned by the infiltration of urine which occurred. This was obviated, and I am pleased to report the *entire success* of these three cases, affording an example of the perfect cure of one of the most troublesome affections to which women are subject.

BARNES' DILATORS.

Dr. Barnes, speaking of the various means useful to effect dilation of the cervix in labor, says, that "water pressure is the most natural, the most safe, and the most effective. An os-uteri that will admit one finger, will admit No. 2 dilator in a collapsed state. The introduction is effected in this way: Insert the point of the uterine sound, of a male catheter, or any convenient stem, into the pouch at the end of the bag; roll the bag round the stem, anoint it with lard or soap, then

pass it into the cervix, guided by the forefinger of the left hand, which is kept on the os-uteri. When the bag is passed so far that the narrow or middle part is fairly embraced by the cervical ring, withdraw the sound, keeping the guiding finger on the os to insure the preservation of the bag in situ; then pump in water gradually. Continue distending the bag until you feel it is tightly nipped by the the os. When this is done, wait a while; close the stop-cork, and give time for the distending eccentric force to wear out the resistance of the cervix. No muscle can long resist a continuous elastic force. From time to time inject a little more water, so as to maintain and improve the gain; but be careful not to distend the bag beyond its strength.

There is, of course, a limit to the distensibility, even of india rubber; and I have been told of cases where the bag has burst. I think this accident ought to be avoided. When you have got all the dilatation of No. 2 that it is capable of giving, remove it and introduce No. 3, which is larger and more powerful. The dilatation that No. 3 will give is commonly enough to afford room for the forceps or the hand. The time required for this amount of dilation, will range from half an hour to two hours; but not to lose time, it is desirable to keep your finger on the edge of the os, so as to be sure that the bag does not slip forward into the uterus altogether, or is not driven down into the vagina by uterine action. If it slips wholly into the uterus, it may displace the hand. When you have gained your end open the stop cock; the water is ejected in a stream, and the bag is easily withdrawn.

The cervical dilator serves yet another purpose. Taking the place of the liquor amnii, it does duty for the bag of membranes. It not only directly expands the cervix, but, setting up a quasi, normal reflex excitation, it envokes the regular action of the body of the uterus.

This proceeding will succeed in a great majority of instances, especially where the closure of the cervix is due to spasmodic action, or where the tissues of the cervix being normal, it cannot expand for want of an eccentric expanding force, as where the membranes or child do not bear upon it. The plan of combining the water dilator with incisons, by means of a knife, is especially valuable in cases of rigidity from hypertrophy of cervix or of atresia of os, or vagina from cicatrices."

Barnes' dilators also afford the most useful and efficient means for the production of premature labor, and in point of safety excel all other means in process, save, perhaps, the uterine douche. They have a much wider range of utility than any, such as the douche, injections to the fundus of the uterus, puncture of the membranes, use of the cather between the membranes and uterine walls, galvanic and electric currents, manual dilation, or use of the knife. None of these last named are adapted to all cases. Every obstetrician can see the very great value the dilators possess in certain cases of ante-partum hemorrhage as unavoidable, and also in puerperal convulsions, during labor, with the os imperfectly dilated or spasmodically contracted, when every means are required to safely and rapidly terminate labor.—*Cincinnati Lancet and Observer.*

N. Y. PATHOLOGICAL SOCIETY.

RUPTURE OF UTERUS—TOO MUCH RELIANCE ON NATURE.

A fourth specimen, also by Dr. Finnell, and on behalf of Dr. T. B. Stirling, was an extensively ruptured uterus. The patient has been attended by an eclectic, who simply watched by her at intervals for three days, during the whole of which time she was in active labor. He had seemingly been content to leave the case entirely to nature, feeding the sufferer with occasional doses of some anodyne preparation. At the end of that time Dr. Stirling was called in, and finding the head firmly packed in the superior strait, at once recognized the indication for interference. He applied the forceps, but the head slipped from his grasp, and after persistent efforts for half an hour he failed to deliver her. Dr. Finnell then arrived, when it was evident that the head had receded and a rupture had taken place. A hurried consultation was held and the result was the rapid delivery of the child by the feet. The patient survived only three hours.

The autopsy made the succeeding day discovered the existence of a very large transverse rupture of the uterus, situated behind and above the bladder. The rent occupied the entire anterior surface, and was evidently occasioned by the prolonged pressure of the fœtal head in that situation against the public bone.—*Dom. Med. Journal.*

PHYSIOLOGY.

PHYSIOLOGICAL ACTION OF ELECTRICITY.

Dr. Richardson delivered a lecture on this subject at the Polytechnic Institution on Tuesday, June 1st. In commencing he gave a brief sketch of the life and labors of William Gilbert, a physician of the sixteenth century, of whom Priestly spoke as the father of electrical science. Gilbert was physician to Queen Elizabeth, who granted him a pension for the purpose of carrying on his scientific researches. He appears to have anticipated many of the more modern discoveries in electrical science. Dr. Richardson recapitulated the chief points of his preceding lecture, and proceeded to speak of the effects of a fourth form of discharge—that from the "cascade battery." This battery, which produces a spark of great intensity, is composed of twelve Leyden jars, the first of which has its interior connected with the positive pole, and the last its outside with the negative pole. The discharge produced instantaneous death; leaving the body quite composed, apparently as if life still remained.

In his former lecture, Dr. Richardson had stated that apparent death from electricity might be followed by recovery. In illustration of this, he exhibited a toad on which he had experimented on the last occasion. The recovery, however, was not always immediate; there were sometimes lassitude, muscular wasting, irregularity of muscular movements, and slow convalescence. These symptoms were occasionally observed after lightning-stroke. In some cases, there was loss of consciousness, followed by paralysis.

The electric shock was not found to produce acute pain; the destruction of consciousness appeared to be immediate. Persons struck with lightning were frequently quite unaware of having felt anything at the time of the accident, and up to the time of their regaining consciousness. Another very curious fact was one which was observed by Franklin. He used to pass electric shocks through persons connected by placing the hand of one on the head of another: when the shock was passed, all bent forward and again rose, but were quite unconscious of the movement. It seemed as if there were not time between the reception of the shock and the manifestation of its effects for the mind to appreciate what had taken place. This was also connected with what was observed in medicine; as, for instance, where epileptiform attacks occured without any premonitory symptoms.

Cold-blooded animals recover much more readily than other animals.

The explanation of the recovery after the apparent destruction of motion and consciousness was shown to be in the fact that the heart was the last part to be affected by the shock, and that the blood had no undue tendency to coagulate: hence the establishment of even a moderate amount of respiration was sufficient to restore the circulation. Even when the heart-beat could not be heard, it still continued; all parts of the heart continuing to act, and all ceasing together. In one instance, Dr. Richardson had observed the contraction to be continued for an hour and ten minutes; and in another, after apparent cessation of the heart's action, it could for some time be stimulated by electricity.

Dr. Richardson then proceeded to consider the positive signs of death by lightning. As far as he knew, they were the following: 1. Absence of evidence of action of the heart; though it must be remembered that the heart-beat might continue, although it could not be heard. 2. Absence of reflex action; in batrachia, however, this did not always indicate death. 3. Diminution of the animal temperature in the cavities of the body. 4. Absence of color in the semi-transparent structures; this was not a reliable test. 5. *General* muscular rigidity was sufficient evidence of death; but not local or partial rigidity, unless it affected the muscles essential to life, as the respiratory. 6. Coagulation of blood in the veins was a sure sign of death. If, on opening the largest vein that could be reached, the blood were found coagulated, there was no hope of restoring respiration. 7. Decomposition was the final proof of actual death.

Marks of various kinds had been described as being left on bodies struck by lightning; and the accounts of some of these had been regarded as chimerical or exaggerated. These marks were: 1, burns; 2, impressions of metallic substances; 3, ecchymoses; 4, supposed impressions of such objects as trees or fences; 5, loss of hair.

1. *Burns* were more likely to be severe when life was not destroyed than when the shock was fatal; they varied in extent, from mere singeing to extensive cauterisation. Pins and other metallic articles of dress often led to severe local injuries—the parts injured being those lying between the metallic points.

2. *Impressions of Metallic Substances.*.—The occurrence of these had been doubted by Faraday and others; but Dr. Richardson had found by experiment, that the impressions of ornaments, etc., might be faintly struck on the surface of the body. The mark was a pure ecchymosis; and, for its production, resistance on the opposite side was necessary. It was not a burn from heated metal; as, under favorable conditions, a simple electric spark would produce it.

3. *Ecchymoses* were sometimes found; as was observed in the case of Professor Richmann of St. Petersburg, who was killed by an electric discharge in 1753, while performing experiments.

4. *Aborescent marks,* wrongly supposed to be impressions of trees, etc., were sometimes found. They were in reality, as was pointed out a hundred and ten years ago by Beccaria, the outlines of the superficial veins of the body. Dr. Richardson had succeeded in bringing out the outline of the veins in the ear of rabbit, by means of the discharge from a Leyden jar.

5. *Loss of hair* was observed in some cases where the nervous system was affected.

Dr. Richardson performed some experiments for the purpose of showing the relative conducting power of nerve-matter, blood, fat, and other materials. The conducting power of fat, and of nerve-matter, was shown to be *nil;* while that of blood was good. Hence it was concluded that, in lightning-stroke, it was not by the nervous system, but by the blood, that the current was conveyed.

A third lecture on electricity will be delivered by Dr. Richardson at the Polytechnic Institution on Tuesday, the 22d instant.—*British Medical Journal.*

MISCELLANEOUS.

HOSPITAL PRACTICE IN VIENNA.

With regard to surgical injuries, the treatment here decidedly tends, I am glad to say, towards simplicity. In my last, I gave the various purposes for which Plaster of Paris was used. One never sees a complicated instrument of any kind. When the immediate application of Plaster of Paris is not considered advisable, fractures of the leg are put up in simple wooden side-splints. MacIntyre's, and the forms of splint allied to it, are unknown, or rather, I should say are not used, here. The American method of treating fractured thighs by extension has found great favor, and it is used also very frequently in cases of morbus coxæ, etc. In one case only have I seen the employment of a complicated instrument. This was Dummreicher's splint, which was used in a case of fracture of the neck of the femur in an old man; and this, it should be added, was discontinued after a few days, and Plaster of Paris substituted. As this splint (the invention of Professor Dummreicher of Vienna) is not very generally known, and as its design does great credit to the ingenuity of its inventor, a brief description of it may not be uninteresting. It is used for fractures of the thigh; and the principle upon which it acts is this, that the weight of the leg shall be constantly acting as an extending force on the lower end of the femur. It consists of a splint of metal very closely resembling a MacIntyre's apparatus, provided with four or six wheels projecting from its under surface, and running on a little railway laid upon an inclined plane, the lowest part of which is towards the foot of the splint. The leg and the lowest part of the thigh of the patient (below the seat of the fracture) are fastened to the splint; and then there is, of course, a constant tendency for the leg, its own weight being the propelling force, to run away, as it were, from the thigh down the inclined plane. This seems, on paper, the perfection of simplicity; but, in practice, so many screws and joints and hinges are found necessary for the proper adjustment of the apparatus, that its utility is very seriously impaired.

Under the care of Dr. Salzer, there is at present a very interesting case of fæcal fistula, which that gentleman has almost succeeded in curing. The patient is a woman fifty years of age, who suffered two years ago from a strangulated inguinal hernia. The stricture was relieved by operation, and the hernia reduced; but a small portion of the gut sloughed away, and thus a fæcal fistula, or rather an artificial anus, was established, through which nearly the whole of the fæces found an exit. The treatment for the cure of this condition was commenced a year ago by the removal of the spur-like valve which in this, as in most of these cases, was the chief obstacle to the onward passage of the fæces. This was accomplished sucessfully by means of Dupuytren's enterotome. After this the exit of fæces was about equally divided between the natural and the artificial anus. A few weeks ago,

Dr. Salzer performed an operation for the complete cure. On the morning of the operation, when we saw the patient, the artificial anus (which was situated in the right groin) was of about the size of a sixpence, and the tissues in its immediate neighborhood were remarkably thin. The operation was performed thus. Two ink-lines were first traced around the opening; the inner one was about two lines distant from the mucous edge of the artificial opening; and the second formed an ellipse round the aperture, being about an inch distant from, and parallel with, the first line. Between these two ink-lines, the skin was removed from the surface of the abdomen; so that the raw surface formed an elliptical band an inch in width round the opening. After all hemorrhage had ceased, the opposite sides of the oval were brought into exact apposition by means of five or six deep and as many superficial *silk* sutures. A few broad strips of plaster were then stretched from one side of the abdomen to the other, so as to remove all tension from the wound, and the operation was complete. The union between the two broad raw surfaces has taken place with great firmness, except just at the lowest portion of the wound, where, unfortunately a slight fistula remains, through which fæcal matter trickles. Dr. Salzer hopes, however, that another and far lighter operation will effect a complete cure. There were one or two points about this operation deserving of especial notice: first, the denuding of so broad a surface (instead of merely "paring the lips"), and thereby increasing the chance of success. The second point was the use of silk suture; and here it may be added, that the metal suture is never used by surgeons here, the silk being used in preference. The third point is, that the whole operation was performed *without Chloroform.* The operation of "flaying" the borders of the fistula occupied exactly two hours, the operator being repeatedly obliged to stop to impress upon his patient the necessity of remaining quiet—a piece of advice on which it was hard to act during so painful a process. It seemed to the bystanders (or at least some of them) that the administration of chloroform would have shortened the operation to half an hour, and have removed all the difficulties. But no: chloroform is not used here so universally and so fearlessly as it is in England; and, if an operation can possibly be performed without it, so much the better. Its mode of administration here is by means of a flannel mask fitting over the nose and mouth, on which the chloroform is sprinkled from a narrow mouthed bottle. Some professors encourage its use more than others. In the obstetrical department, its use is decidedly discouraged by Professor Späth; and, in his wards, all the chief operations of midwifery are performed without chloroform. Professor Braun, on the other hand, prefers operating with his patients anæsthetised. In the half-yearly reports, the practice of these two gentlemen, as regards success, is about equal.

A new perforator and cephalotribe is being used here, the invention of Dr. Guyon, of the Cochin Hospital, Paris. It consists of a long metal rod, furnished with a screw at one end like a brad-awl. This being very slender, the operator can guide it safely and surely along his finger, and bore a hole in any part of the head; and, if the presentation be favorable for such a proceeding, it is recommended that he should perforate the base after boring through the crown of the head. This being done, the perforator is not withdrawn, but it is used as a guide, along which a trephine is made to slide, by means of which a circular piece of bone is removed from the crown, and possibly the base of the skull also. The trephine and perforator are then withdrawn; the former being provided with a shield, so that there shall be no risk of wounding the soft parts of the mother. A circular piece of bone being thus removed from the skull, it is alleged that far less force is required for cephalotripsy, and a far less formidable engine is necessary for its performance. Guyon's cephalotribe resembles a pair of strong narrow forceps, and is worked solely by the operator's hand, without the intervention of screws and winches or other machinery. It has met with much favor here, and is said to answer its purpose admirably.

Bamberger's treatment of typhoid fever by means of cold water is almost universally employed here, and the success with which it has been followed is considerable. Dr. F. Porges informs me that, of seventy cases so treated during the last few months, only four died; and of these four, one died from tuberculosis, and the other three from perforation of the intestine. He states that by Bamberger's treatment he has often succeeded in lowering the temperature one degree or a degree and a half centigrade in the course of three or four hours; that the fever, after the lowering of the temperature, runs a more favorable course; and that the period of convalescence is considerably shortened. I have only had one opportunity of seeing this treatment put in practice. The patient was a stout, strong man, about twenty-five years of age, who was supposed to be suffering from typhoid (the diagnosis was doubtful). He had some headache; the pulse was 100, weak; the temperature 40.8 deg. centigrade. The man was stripped naked, and the bed covered by a large piece of water-proof sheeting. A tub was then brought, filled with water, in which two or three large lumps of ice were floating. A sheet was wrung out of this ice-cold water, and in it the patient was enveloped from his neck to his feet. At the end of twenty minutes, this sheet was removed, and a fresh one applied; and so on every quarter of an hour for three hours. The process was commenced at six in the evening, and finished at nine. The temperature of the patient was diminished to 38 deg. centigrade; and, when I saw him the next morning, he was apparently well. Unfortunately, however, the case was pronounced to be one of "hyperæmia cerebri," and not typhoid fever; but I have nevertheless given it as a sample of the treatment after Bamberger's method.

The method of treating phthisis by *cod-liver oil and ether* is well spoken of here; and I have been shown several patients who are reported to be gaining weight rapidly under it, and notably one who has gained seven pounds in twenty-three days.

There is a great deal of rheumatic fever in Vienna. Six hundred cases of rheumatism were treated in the Krankenhaus in 1867. Colchicum is almost universally given for this disease, and its use is said to be followed by success; but I cannot hear that the cases run a shorter course or a more favorable cause under this treatment than under many other's which have from time to time been tried.

Many complicated forms of douche have been seen of late in London, which, by means of India-rubber balls or pumps, throw a continuous stream of water. There is a douche in general use here called "Esmarch's Irrigator," which is used for washing wounds of all kinds, or wherever a powerful stream of water is required. It is the very perfection of simplicity, is always ready and cannot get out of order. Above all, it costs hardly any money. It consists of a long cylindrical tin pot, at or close to the lower end of which a short pipe issues, to which a long India-rubber tube, provided with a nozzle, is affixed. It is only necessary to fill the tin

pot with water, and the douche is ready for use. In this simple contrivance one has a really useful portable fountain. When not in use, the nozzle of the tube is fastened to a hook at the upper end of the tin vessel.

A very capital inexpensive modification of Ferguson's vaginal speculum is used here. It is called Meyer's speculum. It is exactly the shape of Ferguson's; but instead of being made of ebony and looking glass, it is constructed of white porcelain. It is quite as serviceable as Ferguson's; and, instead of costing ten or sixteen shillings, it may be bought for something less than two.

Allgemeines Krankenhaus, Vienna, April 1868.—*British Medical Journal.*

GLEANINGS FROM THE GERMAN JOURNALS.

By John M. Maisch.

Persulphate of Hydrogen.—A. W. Hoffman has discovered a crystalline compound of this body with strychnia. If this alkaloid is dissolved to saturation in cold alcohol, an alcoholic solution of sulphide of ammonium, containing free sulphur, will in a short time separate from it lustrous crystals; after twelve hours the sides of the galss vessel are covered with beautiful orange red needles, often a centimeter in length, which are obtained pure simply by washing with cold alcohol; they are insoluble in water, alcohol, ether and sulphide of carbon. From the elementary analysis, the following formula is calculatad : $C_{42}H_{22}N_2O, H_2S_6$. Treated with concentrated sulphuric acid, the crystals lose their color, and on the addition of a little water sulphate of strychnia is dissolved, and colorless transparent oily drops of persulphide of hydrogen are separated, which are slowly decomposed into sulphur and sulphide of hydrogen.

Quinia, cinchonia and brucia do not yield an analogous compound. An alcoholic solution of 2-03 grm. strychnia yielded after twelve hours 2-287 grm. of the red crystals = 87-2 p. c. of the theoretical quantity. The author suggests that this compound might probably be serviceable for obtaining pure strychnia from mixtures, &c.—*Chem. Centralblatt*, 1868, *p.* 846, *from Ber. d. deutschen chem. Gesellsch.* i, 81.

Coloring matter of Claret.—A. Phillips states that sesquichloride of iron imparts to the juice of black cherries, huckle berries and mallows a violet color with reddish or bluish tint. Pure claret, on the contrary, is colored red brown. The amount of free acid in the wine influences the shade of the color. The bluish grey color imparted by artificially colored wines, according to Bœttger, to sponges previously treated with muriatic acid, is probably due to their retaining a trace of ferric chloride.—*Ibid.*, *p.* 864, *from Journ. f. prakt. Chem.* ci, 320.

Estimation of potassa for technical laboratories.—Plun Rett proposed bitartrate of soda for this purpose. Gladisz and Balo found that, from pure solutions, the precipitation of the potassa is the more complete, the greater the amount of the reagent added. The potassa of 5 c. c. of a solution containing 10 p. c. saltpetre was completely precipitated by 50 c. c. of a saturated solution of bitartrate of soda, while on using 10 c. c. of the former and 20 of the latter solution, 2-5 p. c. less than the amount of saltpetre was found. Cream of tartar is more soluble in water and in nitrate of soda than in bitartrate of soda. The objection to the process lies mainly in the difficulty of washing out completely the bitartrate of soda from the precipitate.—*Ibid.* 879, *from Ibid.*, ciii, 495.

Preparation of hydriodic acid.—Dr. Cl. Winkler uses a moderately concentrated solution of iodine in sulphide of carbon contained in a cylinder kept cool; a quantity of water is poured upon the solution, varying in proportion to the strength of the acid desired, and sulphide of hydrogen is then passed into the iodine solution. The hydriodic acid generated is absorbed by the stratum of water, while the sulphur is dissolved by the sulphide of carbon; the reaction is complete when the violet color of the solution has passed into a pure yellow. The aqueous solution is then heated to expel the dissolved sulphide of carbon.—*Ibid.* 816, *from Ibid.* cii, 33.

Preparation of cylinders for use with Drummond's light.—Dr. Jos. Phillips, of Cologne, gives the following directions:

Lime cylinders are obtained by burning pieces of white Carrarian marble, free from iron, between coke for an hour to an hour and a half. After the carbonic acid has been completely expelled, the cold lime is sawed into pieces of about 7 centimetres in length and 15 m. m. in thickness, which are preserved between powdered lime. The cylinders are strong and give a bright light.

For magnesia cylinders freshly burned magnesia is mixed with water to a stiff paste, which is rapidly put into suitable unsoldered moulds of sheet iron of the thickness of a thumb; by striking the moulds perpendicularly upon a hard surface, the air is expelled from the mass, which in a few minutes becomes warm, when it is put into a warm oven, where it soon becomes very hot. After about an hour the cylinders may be removed from the moulds; they give a brilliant light, but possess less strength than the former.

Chloride of magnesium cylinders are made in a similar way; the magnesia is first mixed with muriatic acid to form a thick liquid, when enough magnesia is rapidly added to form a stiff mass. When finished these cylinders resemble porcelain and yield a bright light, but give off disagreeable fumes when used. *Archiv. der Pharm.*, 1869, *Jan.* 7, 8.—*American Journal of Pharmacy.*

Prostitution in China.—The *Union Medicale* has an article translated from the German, describing prostitution in China. The evil exists to an enormous extent in the cities of the Celestial Empire. The dwellings where the traffic is carried on are hardly "houses of ill-fame." So far from their being kept shady they are made conspicuous by blue window shades, whence they are called "blue houses." At night the curtains are raised in the front windows, the reception apartments are made brilliant with lights, and the building resonant with what is called music. Their patrons enter day and night without concealment. The prostitutes are entirely in the power of the proprietors of these establishments, and are often sold when children of a dozen or more years, to be trained up to their miserable occupation. When no longer serviceable these creatures are turned off to wear out their existence in the streets, picking up a meagre pittance by mending garments and sundry menial offices.

As a concomitant of the social evil in China, the most unbridled obscenity of language appears in books and in the family circle, the presence of children placing no check upon it.

As a consequence of this state of things, venereal disease is rife and in a virulent form; but is said to be worse among women frequented by Europeans. The Chinese accordingly avoid those women whose traffc is among foreigners, to whom they endeavor to leave the inferior article.—*Boston Medical and Surgical Journal.*

Criminal Poisoning.—M. Chevalier furnishes a table indicating the various substances which have been employed for the purpose of poisoning in the cases which have led to criminal proceedings in France, during the ten years 1855-65. The total number of cases is 494, and the following is the list of the respective articles employed, twenty-nine in number:—Arsenic, 135 times; phosphorus, 180; verdigris, 15; sulphuric acid, 22; sulphate of copper, 83; nux vomica, 1; mercurial ointment, 1; cantharides, 10; glass in powder, 2; sulphate of iron, 3; colchicum, 1; fioraventi balsam, 1; hellebore, 6; tartar emetic, 2; laudanum, 6; carbonic acid, 1; *eau sedative*, 2; ammonia, 3; hydrochloric acid, 4; strychnia, 5; syrup of poppies, 1; mercury, 2; morphia, 1; potash, 1; digitaline, 2; nicotine, 1; prussic-acid, 1; croton oil, 1; antimony, 1; total, 494.—*Chimie Med.*, January.

Prescribing in Cheap Periodicals.—A most dangerous practice prevails of publishing in some of the cheap literature of the day, various receipts for the cure of minor ailments, and it is one that is certainly upon the increase. Many of the prescriptions so given are absurd, and even dangerous; and this is not to be wondered at if we consider that the writer is often very deficient in all real knowledge of medicine, and that he is assisted by the errors of the printer to whom the symbols of quantities are so many hieroglyphics. Our attention has been called to the following prescription for instance: "Syr. of poppies one ounce and a half; syr. of squills, half an ounce; tincture of digitalis, thirty drops; a teaspoonful to be given to a child *frequently*." We can quite imagine a fractious baby being dosed into the effectual quietness of death by such a mixture. —*Lancet.*

Dr. Alden March, who died at Albany, on the 17th instant, at the age of 74, was in many respects a representative man. Brought up upon a farm and gaining the rudiments of his education in the public schools, he rose by indomitable energy and perseverance to high eminence in the most learned of all professions. Commencing practice in Albany in 1820, he soon became known as a skillful surgeon, and rose in fame as he increased in years. To his exertions Albany owes her Medical College and City Hospital. His first lectures on anatomy were delivered to a class of fourteen, in the attic of an old building, and the material for demonstration was brought from Boston at great personal hazard and expense. From this foundation ultimately arose in 1839, the Medical school to which his name has given yearly increasing lustre.

The Street Commissioner has announced an intention to enforce strictly the following ordinance:

"No person shall place or post, or cause or permit to be placed or posted, in any street in the City of New York, any hand-bills or advertisement giving notice of any person having or professing to have skill in the treatment of any disorder or disease, or giving notice of the sale, or exposure to sale, of any nostrum or medicine, under the penalty of twenty-five dollars for every such offence."

From the appearance of the fences, dead walls, and brick-piles of the city, no one would suppose that the above law had existed for three years. The next step to be taken is to secure the absence of such advertisements from the newspapers, where they do even more harm than in the form of posters.—*N. Y. Med. Gazette.*

Apropos of quack advertisements, the following which we find in a daily paper, portends an increase in lead poisoning:

A CARD TO THE LADIES.

ENAMEL.

Ladies can have their faces enamelled in the most exquisite style, so as to last for one day or one year. The preparation used is purely vegetable, and warranted not to injure the skin. It cannot be detected by the most close observer. Eyelashes trimmed and eyebrows arranged so as to add much to the appearance of the face, by M.———,—— Broadway.

All communications strictly confidential.

The unblushing impudence with which every deleterious cosmetic is asserted to be "purely vegetable" would be amusing, if it did not lead so often to disastrous results.—*N. Y. Med. Gazette.*

Description of a New Ligament.—O. Lannelong and A. Le Dentu (*Arch. de Phisiol. Norm. et Pathol.* 1, 448–450), describe a ligament which arises from the posterior layer of the sheath of the sterno-thyroid muscle, inserts itself at the inner surface of the first rib, behind the sterno-clavicular articulation, and is thence continued to the anterior surface of the pericardium. This band includes the remains of the thymus gland. It serves to fix the pericardium at its anterior portion, and is the counterpart of the "ligamentum vertebro-pericardiacum," described by Beraud, which attaches the posterior suface of the pericardium to the spinal column.

Composition of Pure Wines.—The wines named below, generally present about the following analysis to the Imperial pint:—

	Water, oz.	Alcohol, oz.	Sugar, gr.	Tartaric Acid. gr.
Port	16	4	480	80
Brown Sherry	15½	4½	360	90
Pale Sherry	16	4	80	170
Claret	18	2	80	161
Burgundy	17½	2½	...	160
Hock	17¾	2¼	...	170
Moselle	18¼	1¾	...	140
Champagne	17	3	1330	90
Madeira	16	4	400	100

In lead poisoning, Dr. Smith, Lecturer on Medicine at the Sheffield School of Medicine, uses the following prescription.

The mixture which I employ, and which acts with remarkable celerity and certainty, is as follows:—Sulphate of quinine, sulphate of iron, of each one grain; strychnia, thirty-sixth of a grain, dilute sulphuric acid, five minims; sulphate of magnesia, one drachm; water, one ounce; three times a day.—*Dom. Med. Journal.*

Beverages used by the Human Race.—Not less than 500,000,000 of the human race make use of an infusion of tea; more than 100,000,000 drink coffee; about 50,000,000 cocoa; and not less than 10,000,000 of the inhabitants of Peru, Paraguay, and the Brazils, use an infusion of maté or guarana. In England alone there over 100,000,000 lbs. of tea consumed annually, and about half as much of coffee. About 100,000,000 lbs. of tea are consumed in this country.

Health of Mr. Syme.—We are glad to be able to state that the health of our great surgeon continues satisfactorily to improve. He walks in his garden and takes carriage exercise daily. His mental faculties are as clear as ever, and there is every reason to believe that his welcome voice will ere long be again raised in the cause of medical education and reform.—*British Med. Journal.*

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California Medical Gazette.

ORIGINAL COMMUNICATIONS.

DISLOCATION OF THE CRYSTALLINE LENS.

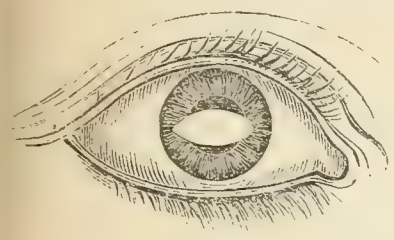

FIG. 1.

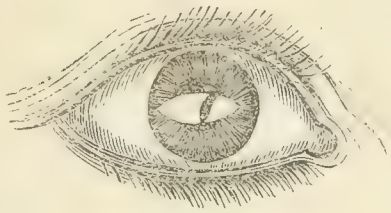

FIG. 2.

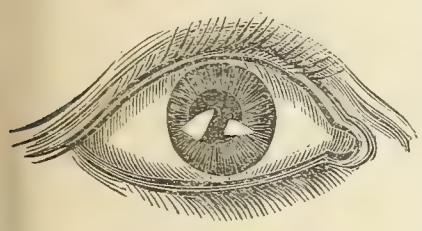

FIG. 3.

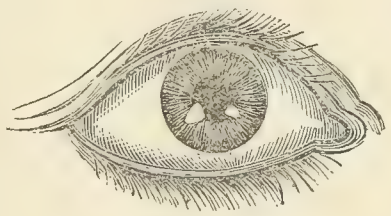

FIG. 4.

PLACERVILLE, July 23, 1869.

DEAR SIR:—I send you a report of a case of dislocation of the crystalline lens of the left eye from concussion of the air, produced by the discharge of a cannon. On the eighth of May last, Capt. J. B., of the City Guards, undertook to assist in firing salutes, in honor of the connection of the two railroads; a premature explosion, while he was loading, blew his left hand to pieces, and scorched his face and chest.

For some time after the accident it was impossible to ascertain the amount of injury to the eyes. He was unable to see, and remained so for several days. Amputation of the hand was performed; a lotion of chloride of sodium was freely applied to the wounded parts. In eleven days he was sitting up in his room, and in sixteen days he went into the street.

When the swelling of the eyelids subsided, an examination of the eyes was made: right eye all right, left eye impervious to the direct rays of light; a bluish white opacity in the anterior chamber, as represented in figure 1, in the diagram I have enclosed—some light passed obliquely from above. I at once recognized a case of dislocation of the crystaline lens.

June 7th.—Absorption of the lens became evident. It separated into two unequal parts, as seen in figure 2 of the diagram. The process of absorption is seen in figures 3 and 4, up to the middle of June.

July 3d.—Thinning and the smaller portion almost entirely absorbed—vision gradually returning—cold water was the only application used. The diagram is rather rough, but the best that I could get.

During forty years, I have seen many interesting cases of surgical injuries, but none more so than this. I have an imperfect recollection of a case of the same kind reported somewhere; but my impression is, that the surgeon had not the opportunity that I had, of watching the case.

Now, my dear Sir, you are at liberty to make what use you please of the case.

I am, yours faithfully,

D. STUART SMITH,
Licentiate Royal College Surgeons, Edinburgh.

[In as much as the dislocation of the lens is supposed to have been caused by the concussion of air, as also the fracture which the diagram plainly shows to have existed, the case is an interesting one. Dr. Smith, in his statement, that he has an imperfect recollection of a case of the same kind, evidently means to say that he has an imperfect recollection of a lens having been dislocated by the same cause. For our own part, we have neither seen, nor can we find the record of any such case.

While it does not appear impossible for the dislocation in the present case to have been caused by concussion of air, neither does it appear impossible that a particle of powder may have entered the eye through the sclerotica, and lodged in the lens, causing its dislocation and fracture, or fracture by subsequent distension. The opacity of the lens in so short a time, would also indicate that it had been wounded.

Authors generally attribute dislocations of the lens to one of three causes, viz: from blows on the eye, from the concussion of blows on the head, and spontaneous. Spontaneous dislocation simply means, dislocation from unknown causes. Some authors, however, and we think correctly, attribute the so-called spontaneous dislocations to disease of the vitreous humor, which causes the suspensory ligament to become detached from the choroid, and thus allow the lens, generally enclosed in its capsule, to drop into the anterior chamber or back into the vitreous humor.

As regards the treatment of dislocation of the lens into the anterior chamber, we believe that it should be removed always, either by extraction or back into the posterior chamber. As a rule, extraction is the better treatment when the dislocation is from injury; while in the so-called spontaneous dislocations, extraction is of less consequence. The lens may be allowed to absorb in the posterior chamber, as the function of the retina is generally found to be impaired in the latter dislocations, and sight but imperfect at best].—EDS.

DR. SCOTT ON UTERINE DISPLACEMENTS.

By C. A. Buckley, B. A., M. D.

There is probably no subject connected with medicine so completely ignored as its history, and considering the advantages that may be derived therefrom, this is very much to be regretted. I think it can scarcely be questioned, that a more diffused and accurate knowledge of this interesting study would save us from many of those ephemeral and bewildering theories, with which our medical journals are crowded; while at the same time, it must disarm all adverse criticism of the bitterness and rancor, which, in times not very remote, have characterized it. Probably there are few things that can so frequently bring a blush to the face of the votary of the "Healing Art," as the remembrance of the disreputable quarrels of some of our predecessors; as the fact that no great and lasting innovation has ever been introduced into medicine, without having previously passed through a storm of abuse and reproach, that threatened for a time to annihilate it. Who can now recall the brilliant yet simple discovery of Harvey, without amazement at the obtuseness of the minds that could not grasp it; or indignation at the quibbling, and deceit, and dishonor of those, who, while they must have seen the utility that should accrue to the human family from that discovery, still, through personal motives of a base character, refused to acknowledge the boon, nay, virulently set face against it. But apart from the great revolutions in medicine, I believe the history of Lithotomy alone, from Ammonius Lithotomus to Cheselden, would furnish as discreditable a chapter as any "noble profession" on earth could claim; and when we remember the base and foul misrepresentations of Drelincourt and the Callot family, against LeRaoues—of the imbecile Mery and his colleagues, against Frere Jaques, we rejoice more or less over the merited obloquy that has fallen on the names of those, once industrious in crying "quack," at the innovators, whose labors remain the lasting triumph of truth over falsehood and injustice. Yet, while we fully recognize, and condemn, the base artifices commonly resorted to in opposing many of the most valuable scientific improvements, it is nevertheless true, that only by full and free discussion, has any great truth been established on a permanent basis.

It is, then, in this open and candid spirit of inquiry after truth—free alike from the desire to cavil or condemn—that I wish to approach the subject of the present paper.

That the contributions of Dr. John Scott, on "Uterine Pathology and Treatment," recently published in the Gazette, have attracted much attention among the members of the profession in this city, is undeniable; nor is it the less true, that they have met, in some quarters at least, an amount of bitter, invidious hostility, worthy of "better" days; while no one seems to have the hardihood, so to speak, or desire to openly challenge the correctness of his views. This latter is the more to be regretted, as the didactic tone and earnestness of the papers are unmistakable; and it is the solemn duty of us all, especially of the experienced, to inquire into new doctrines of a startling character, and refute them if they are believed to be false.

At the very outset, Dr. Scott fearlessly proclaims that he follows no beaten track—that he has formed "definite views" of his own, on both the pathology and treatment of uterine complaints; and the latter, he assures us, has been followed by "most gratifying success." If this were so, mere theoretical objections to his practice would be simply idle, and should have no weight in determining the course to be pursued by every earnest laborer in this field; for we are all aware how many valuable practical points have been introduced into medicine, despite the most plausible opposing theories: and how many excellent results constantly follow a practice which admits of no sustaining *rationale*. But it strikes me, that the authenticity of this "gratifying success" is not as clearly established as should be the results of what we must, at least, characterize as a most daring innovation on this delicate region of medico-chirurgical practice. We have not those extensive and unimpeachable statistics, which alone in this case, could weigh aught against sound theory, and overwhelming evidence of an opposing character; nor is the mere dictum of a gentleman, however well-meaning, who *publishes* a case of "ovariotomy," in which the tumor "arose directly from the uterus"—a contradiction in terms—to be regarded as wholly reliable, in supporting what appears *prima facie* gross and unwarrantable surgery, against the teaching and practice of all our most esteemed authorities.

To enter a little into the details, one of the first assertions in those papers—that, "in nearly all chronic affections of the uterus, some malposition of it exists"—is, I believe, unsupported by any other writer, and contrary to the experience of all who have paid any attention to uterine disease; and it certainly would be a most unique mode of treatment, if, in the case of every sufferer from leucorrhœa, presented to us, we directly commenced "slitting up" the uterus—Dr. Scott's invariable treatment for malposition. In the North Dispensary of Liverpool, where some 20,000 patients came

annually under treatment, either at the institution, or at their own homes, there were necessarily numerous cases of uterine disease;—I cannot, unfortunately, lay hands on a copy of an annual report—and during the two years of my connection therewith, I can unhesitatingly aver, that of all this class of maladies treated, no less than 60 per cent. were leucorrhœa, depending simply on constitutional causes, and no wise connected with "malposition." In the matter of erosion of the os, and induration of the cervix uteri, which he "*maintains* are but the expressions of a disease which affects the body of the uterus"—why should a gentleman, who starts with "definite views," go to the trouble of "maintaining" what is so generally admitted? Had not Scanzoni, West, and Graily Hewitt previously maintained and taught the same? Graily Hewitt says:

"The os and cervix uteri are generally more or less affected, when the uterus is the seat of those textural changes to which we give the name of chronic inflammation of the uterus; but what we generally find, is, that the body of the uterus is at the same time altered. A diseased condition of the os and cervix uteri, as revealed by the speculum, is, as a rule, *associated with disease of the fundus or body of the uterus.*"

With regard to the causes of flexions of the uterus, it may be worth while to compare the two following brief passages:

Dr. Scott.—"The causes which give rise to misplacements in the married, principally arise from *miscarriage* and *deficient involution* of the uterus after parturition, and the evil once produced, perpetuates itself."

Dr. Graily Hewitt.—"It is thus very frequently associated with *defective involution* of the organ, the patient having also undergone too much exertion within a short time after delivery. *Miscarriages* are very liable to give occasion to flexion for a like reason."

My object is not, however, to obtain a conviction of plagiarism against Dr. Scott: it is to test the soundness of his "definite views," and to this end, it becomes necessary to quote, unabridged, a very important part of his second paper:—

"Woman may indeed well bewail her lot, when she considers herself not only heir to the sorrow which maternity entails, but is obliged to carry about with her, *and in her*, foreign bodies, which at most only *relieve*, but do not *cure*, the affections to which her sex has made her liable; while they too constantly produce filthy discharges, and give rise to ulcerations or perforations, and produce pelvic inflammations, which fix the uterus permanently in its false position, and render her condition indefinitely worse than before. It is but too evident, that those who advocate these filthy and mischievous contrivances, have never considered the actual position of the healthy, unimpregnated uterus in the abdomen, and how impossible it is for them to imitate nature by the most ingenious of their contrivances.

"I purposely exclude everything in the shape of 'stem' pessaries, for the reasoning which attempts to reconcile the possibility of keeping a foreign body, with impunity, for any length of time in the cavity of the uterus, scarcely merits refutation, and the injury and fatality which have resulted from this 'spiking' of the uterus, has caused the abandonment of the practice; but I take the pessaries in common use, such as the circular, the air pessaries, Hodge's, Z. Walker's, Graily Hewitt's, and all the endless varieties of which they are susceptible. Putting aside altogether the diseased conditions of the uterus, which gives rise to misplacements, do they so rectify the latter as to place the organ in its natural position, and *maintain* it there? I say, most unhesitatingly, *no*!"

This is really too grandiloquent for a man of even Dr. Scott's renown; or rather perhaps it shews an amount of reckless self-conceit, unpardonable if it came from even a medical undergraduate. It is too evident according to Dr. Scott, that Sir J. Y. Simpson and Dr. Graily Hewitt, "have never considered the actual position of the healthy uterus." This brilliant innovator in this "centre of the universe" thinks that the teaching and practice of the greatest gynæcologist of any age or country, and those of the president of the "London Obstetrical Society" scarcely merit refutation; for he must be aware of the fact, that both Simpson and Hewitt still use those terrific "stem" pessaries; still actually "spike" the uterus, notwithstanding its deplorable train of ills. (See Graily Hewitt's "Diseases of Women" 2d. edit. London 1868, pp. 453 and 504). Now where are we to find that dire "fatality" so graphically sketched in the above quotation? surely the record of it ought be given in dissuading us from a practice at once so venerable, and so highly recommended. For my own part, I can see no physiological nor pathological reason why a simple ebony pessary in the uterine mucous membrane, should be in any way as disastrous as those tampons of cotton, soaked in caustic fluid—perchloride of iron—and retained in apposition with a raw and bleeding surface in this very vascular region, so strenuously recommended by Dr. Scott, and this too in some cases "from the fundus to the os." (See cases published by Dr. Davies, in *Gazette* for Jan. 1869). Though it is really of no practical importance to follow those papers in detail, yet as it is essential not to misrepresent the writer, I must make another brief extract. "In entering on the treatment of retroflexion," he says: "the first and most important point to determine—a point which I have not seen insisted on—is the existence or non-existence of adhesions." Dr. Scott freely quotes Graily Hewitt's pessaries, and appears quite familiar with his "causes of flexions," if we may judge from the similarity of expressions; yet it is strange his *treatment* should have altogether escaped his notice, for under that heading, at the very outset, Graily Hewitt, clearly and forcibly insists on this

very point of adhesions or non-adhesions. (See page 503 of his book). But between the views of Dr. Scott;—*i. e.* if, after all, he will claim any different from Dr. Emmett, for we are told "if his monograph were generally known to the profession, this article would be unnecessary"—and those of our standard authorities, the main points at issue, are in relation to the exact pathological conditions at the seat of flexure, and the treatment of flexions generally. If I can understand him aright, Dr. Scott, though he believes "atrophy may occur," constantly insists on "hypertrophy" and "interstitial deposit" at the seat of flexure; a view which I cannot find supported by any pathologist of repute. Dr. Graily Hewitt, whose authority I have not cited more frequently than his high reputation and excellent work warrant, invariably speaks of atrophy at the seat of flexure, greater on the concave than on the convex side of the uterus. This he considers the effect, not the cause of the flexion. Klob, in his "Pathological Anatomy of the Female Sexual Organs," giving the opinion of Rokitanski, in which he himself concurs, says:

"That in consequence of these conditions, ante-flexion occurs more frequently than retroflexion, is explained by the fact that the uterus, in its normal condition, exhibits a slight anterior curvature, and furthermore, by the fact that the sub-mucous stratum spoken of, is much thinner at the anterior semi-circle of the interior os, than at the posterior, and consequently is more readily atrophied."

Further on, of retroflexion he says:

"It is very important again, to note that the most frequent predisposing cause, is atrophy of the sub-mucous tissue."

Here is an overwhelming mass of evidence against "hypertrophy" and "interstitial deposit," and this too, it must be remembered, from men who write solely on pathology, and whose accurate description of morbid conditions generally, almost every investigator of distinction has confirmed. Should not a careful writer, promulgating new doctrines, have the prudence of showing the falsity of the statements made by those authors, before making assertions quite in opposition with them? I fail to find an attempt at anything of this nature in Dr. Scott's papers. Now, if the pathological condition of the parts be such as the authorities quoted assert, all the rationale—a matter which, by the way, he seems to perfectly ignore—of Dr. Scott's treatment falls to the ground instanter. But admitting that his own view of the pathology is the correct one, can it occur to any sane mind, that the mere splitting of the cervix, could elevate the body of the uterus already pronated. Is it not much more reasonable to consider that the "tampons of cotton placed in the *cul de sac* of the vagina behind the os uteri," by Dr. Scott himself, together with the after-treatment adopted in retroflexion, should be the really efficient portion of all the means employed, and the cause of their attendant success? And, is not this the more probable, when Graily Hewitt assures us, that in cases of simple flexion, unattended with adhesions, success usually follows rest, douching, and the occasional use of the uterine sound, to restore the fundus to its normal condition? If this be so, and I have reason to know that *cures* are so effected, is there not something gross and repulsive in splitting up the cervix immediately, in a case of uterine flexion presented to us for the first time? But I fly not in the face of reason or authority, and assert that this division of the cervix uteri, is never necessary, nor do I for a moment deny its vast utility, in the enucleation of intra-mural tumors, or in the treatment of complete stricture of the os, accompanied by dysmenorrhœa and sterility, as taught and practiced by our greatest gynæcologists. What I deny, and have a right to deny is, its utility in *all* cases of flexion, the vast majority of which can be *cured*, not *relieved* without any operation whatever, according to our most reliable authorities. There is a still more remarkable and most important difference between the practice of Dr. Scott, and that of all other laborers in this field, not excepting Marion Sims and Dr. Emmett, I believe, the most advanced apostles of "splitting;" for, while it would seem that in no case do these gentlemen incise beyond the *cervix*, Dr. Scott boldly launches into the matrix itself. He is not content with mere "tinkering at the basement," as a gentlemen in New York recently characterized Dr. Emmett's plan, but dauntlessly ascends to the very roof itself, and there, with vigorous arm, commences the work of reconstruction, and lest there may be any misunderstanding as to his meaning on this score, he adorns his papers with one of the most artistic prints of a morbid uterus, with full complement of incisions, ever idealized by human brain; though a hypercritical pathological artist may object to its being sketched from a bladderless subject. If however, the author's meaning is not sufficiently clear, even from the wood-cut alluded to, we have still further proof of his "daring ascent" in the "Brief Record of Cases," published by Dr. Davies in the January number of the *Gazette*. Herein the writer details the case of a *menorrhagic* subject with "general debility."

"On examination, the entire uterus was found hypertrophied and indurated: organ lying to left side, left ovary prolapsed and tender to the touch: os patulous, and a small mucous polypus projecting: no erosion. *Treatment*—The small polypus was snipped off with the scissors, and a

free incision was made into the indurated tissue, both anteriorly and posteriorly *from the fundus to the os.*"

After which come the per-chloride of iron, use of the sound, and last but not least, mercurials, and the patient is "dismissed well." Whither was the *left* ovary prolapsed, when the uterus was "lying to the left?" How was it diagnosed to be the ovary? "Dismissed well!" Thus lacerated for menorrhagia and hypertrophy! If so we must pause and admire —not the treatment,—but the splendid amount of vitality with which some human creatures are endowed! But let me ask in reference to all this "free incision" of hypertrophied uteri, what is the object sought to be attained; or is it in accordance with our experience of cicatrices generally, that the cicatriced tissue, developed around the wounds thus made, will be less hypertrophied than the parts previously were? What should we think of the vandalism of the surgeon, who, with bistouri caché, at the end of his catheter or stomach pump, would launch forth freely, into hypertrophied bladder, in chronic vesical catarrh, or into hypertrophied stomach, in chronic gastritis? In conclusion I must observe that Dr. Scott's success appears to me, not simply "gratifying," but perfectly marvelous, for it seems that the "free incisions" of his cautious blade, not only have reduced an indefinite number of hypertrophied uteri to the normal standard, but even the congenitally undeveloped organ has acquired the natural size—"in one case a full inch was gained"—under its truly magic spell —aided of course in both cases by a little judicious plugging.

ON NÆVUS MATERNUS AND ITS TREATMENT.

Read before the Sacramento Society for Medical Improvement, by G. G. Tyrrell, L. R. C. S. and K & Q. C. P., I.

Among the congenital or acquired deformities so frequently seen in infantile life, we know of none so distressing to the feelings of the parent as Nævus. True it is not usually productive of the many more serious difficulties consequent on deformity of the locomotive powers, or malformation of the gastro-intestinal or genito-urinary tracts; still where nævus is situated on exposed parts of the body, relief for such cases is much oftener and earlier sought, than for other diseases situated elsewhere, from the unsightly appearance of the evil, rather than from the supposed danger to the infant's life. It becomes the Surgeon then to enquire particularly into the nature of the malady, and endeavor to arrive at the best and safest mode of removal.

Before entering into the different modes of treatment which from time to time have been presented to us, as worthy of imitation, it might be as well to enquire somewhat briefly into the pathology of the disease.

We are accustomed to divide Nævi Materni into arterial and venous, according to the supposed nature of the circulating medium. That this is an artificial distinction, and unworthy of particular attention, we are by no means prepared to say, for we think that most modern authors recognise the two varieties, although it is sometimes most difficult to draw the distinction. We are, however, told by John Bell, and afterwards by Dupuytrean, that arterial nævus or aneurism by anastomosis consists in an "active congery of vessels distending the cellular substance through which they pass, and giving it the same resemblance as that witnessed in the gills of the turkey, or the corpora cavernosa of the penis. Later pathologists, however, assert that the supposed identity with erectile tissue is not proven, and the term aneurism by anastomosis fails to convey to the surgeon the true pathology of the disease he has to treat. As a dissertation on the pathological refinements of the present day would occupy more time than would be attended with real benefit, we will content ourselves with the knowledge that in aneurism by anastamosis, we have a disease to treat consisting of a congery of dilated arteries, a tumor pulsating synchronously with the heart, easily emptied by pressure, usually subcutaneous, and generally soft, but, under excitement or irritation, becoming remarkably tense and turgid; if wounded, the blood does not flow per saltum, but preserves its bright arterial color.

Venous Nævi, on the contrary, are considered a congery of dilated veins or a congenital organic malformation of the skin, the mature texture of which does not exist, but a plexus of vessels is substituted for it, not endowed with the sensibility of the cutis itself. Such were the pathological ideas of Lassius, and modern authors have accepted them as true in part, but not altogether. Now let us review the differential diagnosis of the two forms; in the first place, we are told that the arterial nævus can be emptied by pressure, and pulsates synchronously with the heart. Is this a true test? I think not; as any surgeon who has had much experience in the disease, will have met with cases distinctly venous, that pulsated strongly and were likewise emptied by pressure; and again, cases apparently arterial, that neither pulsated, or were susceptible of decrease of volume by pressure. The question naturally arises: Have we any distinctive or pathognomonic signs of arterial nævus as contrasted with those of venous origin? And again, to what class will you ascribe those that,

venous in appearance, have an arterial impulse, and vice versa? We fear that in answer to the first question, we must reply, that excepting the synchronous pulsation with distinct "Bruit" we have no pathognomonic sign of distinction between arterial and venous nævi. The florid color of the growth supplied with arterial blood, its rapid increase, and frequent susceptibility to diminution under pressure, will no doubt assist us in our diagnosis; while the superficial character, slow growth, purple color, and absence of "Bruit" will often enable us to pronounce the sanguineous supply as venous, even though there should be an arterial impulse communicated to it. To those cases that are arterial in appearance without the distinctive marks of arterial supply, and *vice versa*, must apply the term *mixed*. They are, in our opinion, the cases most commonly met with in practice, and, therefore, deserve our attention in proportionate manner.

Nævi may still further be divided into those that are strictly congenital, and those that appear at a longer or shorter period after birth. The latter class will we think be found the most numerous in point of history, but in fact were we to trace each case narrowly, we will find that the mother or nurse, a very few hours, perhaps minutes, after birth, noticed a small red speck on the baby's face or body, which being no larger than a pin's point, was suffered to pass unnoticed, in the belief that it would "wear off." Still oftener will we find the mother protesting that no mark was ever on her child until it was two, three, or four weeks old, and she will then generally ascribe it to a fall or a bruise received at the hands of the nurse or the too often officious midwife, as the case may be. Indeed, mothers will ascribe such marks to anything, rather than the true cause, which we conceive to be deficient development or arrest of development in venous, or excessive development in arterial nævus.

In all cases of nævus occupying the exposed portion of the infants' body, we must ever be ready to apply the surgical means for its removal, as in many cases the death of the child would be preferable to the parents, than hideous deformity. It becomes us then as surgeons, to review those means, and adopt with promptness, that, which seems to us best suited to the particular case under our care. Since the days of Bell, the treatment of nævus has varied but little. In his time pressure, caustics, actual cautery, ligature, acupuncture and acupressure were modes in different cases adopted. More recently Mr. Pendleton of New York, introduced vaccination, and other, not less distinguished surgeons, the injection of stimulating fluids, and the galvanic cautery. The list is a long one to choose from, and as all the modes enumerated have in certain cases been successful, the particular operation to be undertaken in any given case, must be left entirely to the skill and judgment of the operator. Pressure seems of all modes to be the least trustworthy, although Boyer relates the case of a mother curing a nævus on her infant's lip by pressure of the finger, applied for seven hours each day. Mr. Abernethy was a strong advocate for this method of treatment combined with cold astringent lotions, especially in the treatment of subcutaneous aneurism by anastomosis; and even the late Sir Benjamin Brodie suggested a disc of ivory or lead to be placed over the growth and firmly bound down by strips of plaster.

Caustic, in some form or other, finds favor with some surgeons, and where the nævus is small or in cases of circumscribed teleangiectasia, such treatment is very generally successful.

Among caustics, the nitric acid holds a good reputation, although in our hands we must say, it has not succeeded as well as authors on the subject led us to suppose. Of the other modes of treatment we will mention injection, ligature, and excision; and illustrate them by relating some cases in which all three modes were used. Excision we introduce, not on account of its general adaptability to the disease in question, but to illustrate a comparatively new feature in the manner of operating, which may well claim the attention of surgeons. In former days, surgeons dreaded the operation of excising a nævus, first, on account of the terrible hæmorrhage, and secondly, on account of the dreadful pain produced by the actual cautery, which was the only efficient hæmostatic known in those days. Mr. Gay, of St. George's Hospital, proposes to excise all nævi of small size, situated on parts where the elasticity of the skin will admit the approximation of the cut edges of the wound. His modification to control hæmorrhage, is, before operating, to pass a silver pin under the nævus, so that the ends will emerge about one eighth of an inch on each side beyond the extreme edge of the growth, then remove the whole of the nævus by incision close to its margin, and instantly bring the sides together with a figure of 8 ligature over the needle, as in cases of hair lip. In the case related by him, in which he performed this operation, he found that the bleeding was only arrested at the point of contact, and that two more pins had to be subsequently introduced before the bleeding was stopped. The case was however, completely successful, the wound uniting by first intention, and without leaving any mark save the linear one usual on a clean incision. In a case under our own care,

we adopted Mr. Gay's plan, with a slight modification. The case was that of an infant eighteen months old, immediately under whose left eye was a nævus of rapid growth—venous in character, and of the bulk of a walnut in size, it involved the inferior portion of lower lid, close to the inner canthus, thence extended downwards and outwards along the infra orbitar ridge, about an inch and a quarter. It commenced as a small speck, seen three days after birth, and ascribed to the nurse picking something out of the child's eye. It gradually extended, and within the past month attained its present dimensions. We commenced the operation by passing three silver needles from above, downwards, completely under the tumor, raising it off the tissues for that purpose, instead of simply passing one needle, as recommended by Mr. Gay, which would, as in his case, have been useless to control the hæmorrhage from so large a surface. We then with a sharp scalpel, completely excised the growth off the needles, and they being all inserted, enabled us in a moment to close the wound throughout its whole extent, without any hæmorrhage beyond a few drops. The figure of 8 ligature being now applied the operation was complete. In 56 hours I removed the pins; union was perfect, and the case succeeded admirably, no trace of nævoid tissue remained, and nothing but a linear scar marked the seat of the diseased growth.

The advantages of inserting all the pins necessary before operating is obvious, you then have no dread of hæmorrhage, no small matter in infants, as a moment approximates the edges of the wound along its whole extent, and the pins keep them there while you are running on your ligature.

In Mr. Gay's case the single pin was not sufficient to control the bleeding, and he was obliged to insert additional pins after the operation, which, let me assure you, must have been a source of much embarrassment and annoyance in dealing with so vascular a structure. There is however, one point in performing this operation which surgeons will do well to bear in mind, and that is to bury their pins deep under the nævus. If you do not, the knife is arrested before it reaches the bottom of the growth, and the success of the operation endangered.

Of the treatment of nævus by ligature I will mention the case of a child who had a vascular growth, commencing immediately over the parotid gland, upon the left side. It was subcutaneous in the first instance, and attributed by the mother to the midwife's fingers in drawing the child's body into the world. The midwife supposed it a bruise, and consequently poulticed it for some time. She then advised a physician to be sent for, and it was seen by an extremely intelligent surgeon who thought that it was an abscess, and advised the poultice to be continued. About a week after, the same surgeon again saw the case, and decided to explore the tumor. Accordingly a bistoury was introduced, and a gush of blood followed. It was concluded that the matter was not ripe, and the case was abandoned for a time. Its growth continued, and I was asked to see it. I then found a tumor occupying an extent of surface from the front of the meatus to below the angle of the jaw backwards over the mastoid process, downwards about three inches. In size it was about that of a large orange, soft and doughy, could be partially emptied by pressure, and when so emptied had a tuberculated feeling hard to describe, but perfectly characteristic of a nævoid growth, which I diagnosed it to be. I declined to take charge of the case without the first surgeon who was called being sent for. He came, but strange to say, still persisted in his belief of the purulent contents of the tumor. We accordingly agreed to wait. Four weeks after, he sent for me to see the case, and then we found the tumor with all the characters of a venous nævus, the vessels being large, the tissues purple, much distended, and growth proceeding rapidly. The tumor was now as large as a cocoa nut, and very vascular. I advised ligature subcutaneously, which I accordingly proceeded to apply after the following manner; by first taking a long needle and double ligature and passing it underneath the growth, from behind forwards, then freeing the needle, I took up one thread and repassed the needle through the opening of exit, and subcutaneously passed it round the tumor, where I made it emerge at the apex of the growth; then reintroduced the needle through the same opening and passed it directly from above downwards through the growth, and freed my needle, leaving the ligature hanging—with the other ends of the ligature passed in opposite directions subcutaneously, they all emerged at the lower end, and were there tied firmly. A minute after tightening the ligatures, the tumor became quite dark, almost black, the circulation being evidently arrested. After some time, the centre of this mass sloughed out, and, the growth was renewed round the edges. These were subsequently ligatured subcutaneously, and finally the disease was arrested. The tissues were replaced by a white scar, but a tendency to a reproduction of vascular tissue continued, over the cheek and down the neck; he remained under observation for a period of eighteen months after the operation, without any decided recurrence of the disease, and finally died of acute dysentery. In this case there was nothing to be

done but ligature. Here, caustic incision, hot needles or injection were out of the question, not only from the size and vascularity of the tumor, but from the proximity of important nerves and vessels. The ligature was successful, as far as removal of the growth was concerned, but not in restoring the tissues to their natural appearance.

In the following case, I used an injection of the perchloride of iron, and, I must say, with more satisfactory result than any other injection I ever used.

J. M. æt. 11 months, was brought to my office July 19, 1864, with nævus of upper lip. The appearance of the growth is most formidable, originally occupying the centre of the lip, it has now extended laterally to either commissure, and involves the whole thickness of the lip. Superiorly it encroaches upon the *alæ nasi*, completely filling both openings. Pressure seemed to empty it but very little, while every cry of the infant distended the whole mass enormously. From the previous application of caustic, the centre of the tumor had sloughed out, exposing the alveoli immediately beneath the septum nasi. The edges of the ulcer left, looked very unhealthy and bled furiously upon the slightest friction; round this opening the nævus was raised and nodulated, very thinly covered with integument and of a bright purple color.

Inside the lip, the tumor projected as large as a walnut, very vascular and supplied by several large vessels which could be traced beneath the mucous membrane in either cheek. From the history of the case, the growth of the tumor must have been very rapid, and evidently the supply of blood was large, although no pulsation was detected. From the large extent of tissue involved, I discarded the idea of incision. Ligature was likewise untenable, as the resulting slough would not only cause great constitutional disturbance, but also involve the loss of the lips. Caustic had been applied with the result of causing increased rapidity of growth and frequent hæmorrhage; heated needles were likewise inapplicable, and the only course left was seton or injection. I chose the latter as more likely to give favorable results, and not so likely to produce exhaustive suppuration. Accordingly with a graduated screw syringe, I injected 2 drops of perchloride of iron into the portion of the growth to the right of the median line; also, 2 drops into the corresponding left portion. In a moment the parts injected turned quite black, and a portion, about the size of a pea, became of a stony hardness. Deeming it prudent to desist from further injection lest sloughing should ensue, I desired the child to be brought to me again in two days.

21st. The parts injected have become quite shrivelled, diminishing the size of the growth considerably. I now injected the portion filling the nares and threw in a couple of drops into the mass under the lip; desired to return in one week.

28th. The part injected near the nares has sloughed, and is now in process of separation; the portion under the lip is much diminished in size.

July 30th. The slough having become detached, I now injected the portion to the left of ala nasi, and the portion under the lip in two places. The mother now took the child into the country, and I saw it no more until the 26th of August, when it was again brought to me. I was amazed at the change. The whole mass had shrunk and diminished to about the size of a dime; the center had filled up with a deep purple cicatrix. Beneath the lip was a small nævoid projection about as large as a cherry-stone, but very vascular. This I injected, and also the edges round the cicatrix. The injection this time ran along the margin of the lip, on the right side as far as the commissure, marking its way by two black streaks in the mucous membrane. In three weeks I again saw the child. The mother considered it well until four days ago, when the tumor again began to rise above the level of the lip. I injected the prominent point and sent her home. Three months later the child was to all appearance quite well, the parts injected were natural in appearance, and were it not for the unsightly cicatrix in the center of the lip, no one would suspect that it had been the seat of so unpromising a growth.

Upon referring to authorities on the subject of injection with perchloride of iron, I find that it has been used with fatal effect in two cases at least. One mentioned by Mr. Carter of Stroud, who injected the iron rather suddenly on account of some catch in the piston, which caused it to jerk the fluid rapidly. The child gave one cry and was dead. Mr. Crisp, of Melbourne, relates another case; a child suffered from nævus of the cheek, into which the perchloride was injected, and in fifteen seconds the child was dead. On examination it was discovered that the point of the syringe had passed into a small branch of the transverse facial vein. The blood was found coagulated in this vein and in the venous system down to the right side of the heart which was filled with a firm clot.

Mr. Paget relates a case, where a small quantity of dilute liq ammonia caused instant death in a child two years old. From these lessons we may learn to use the utmost caution in injecting nævi about the head or face, especially with the perchloride of iron. Mr. Haynes Walton advises the use of tannic acid in these cases, but I cannot see how it would be

less dangerous, as it is not the injection used, but its effects, that produce the mischief. As this paper has already exceeded the limits to which I intended to confine myself, I will not do more than allude to the treatment of nævi by tatooing, which in the strictly cutaneous variety, seems to be attended with very good results, but whatever means we adopt, let us constantly bear in mind that perhaps the happiness of the future man or woman, will greatly depend upon the skill and assiduous care with which we remove a deformity, a "blot upon the human form Divine," which none can look upon without repugnance, and few without unkind remark.

CORRESPONDENCE.

Boston, Mass, August, 1869.

Messrs. Editors :—

The medical societies of this city are quite numerous, and their meetings generally well attended.

First, in point of members, is the Suffolk District, which holds monthly meetings, except during the summer months, which are devoted to reading of communications, written and oral reports of cases, the exhibition of pathological specimens, and discussions upon subjects introduced in any of these ways. At the close of each meeting a collation is furnished. This society numbers about two hundred and fifty members, embracing all the members of the Massachusetts Medical Society residing within the limits of Suffolk County. Eight sections have been formed, to which are referred the various papers and subjects of interest falling within the limits of each. Reports upon such papers and subjects from the sections are in order at each meeting.

The Society for Medical Improvement is a select society, to which gentlemen are eligible to election to membership after having been engaged in the practice of their profession in this city for two years. This Society numbers about ninety members, and holds fortnightly meetings which are devoted to the reports of cases, the exhibition of pathological specimens and discussions arising therefrom.

The Society for Medical Observation is also a select society, numbering about forty members, and also holding its meetings every two weeks, except during the summer months. This society was founded for the purpose of affording opportunity for mutual and close but friendly criticism upon papers read by its members.

A paper based upon some case actually observed by the reader in the practice of his profession is read at each meeting, it being the imperative duty of each member to *read* in turn, and the chairman then calls upon each gentlemen present for remarks, criticisms and questions addressed to the reader. *Oral communications*, the presentation of pathological specimens, etc., occupy one half hour previous and an indefinite length of time subsequent to the reading of the regular paper. This society also subscribes for about twenty medical journals in different languages, which are circulated among the members.

The Obstetrical Society numbers about thirty members, and holds monthly meetings.

The Boylston Medical Society is composed of medical students connected with the medical department of Howard University, and holds meetings during the winter session of the school.

The above mentioned, together with the newly organized Gynæcological Society, constitute all of the medical societies of this city, holding meetings of a purely professional character.

Typhoid fever is much more prevelent here than usual, particularly so early in the season. The cases generally, are of a mild type.

Cholera Infantum also commenced much earlier than usual, there being a large number of deaths from it during the latter part of July; but the cool weather of the last week has very materially diminished the number of cases.

Rheumatism has shown itself pretty largely in the hospitals for a number of months past. The treatment most in vogue by the attending physicians, is that by alkalies and opiates. Of the alkalies, the preparations of potash and soda are the most used. Many physicians, however, more especially in private practice, prefer the syrup of lime above all alkalies, the use of which was brought permanently to notice by Dr. C. E. Buckingham, of this city, a couple of years since. So far as my own experience goes, I must say, that the syrup of lime, when properly prepared and administered, has proved itself far superior to any other remedy in the treatment of this most rebellious disease.

J. B. T.

Editors California Medical Gazette:

Gentlemen:—

The following case, is, I think, from its singularity, worthy of notice.

A. A. C. attempted suicide at 1 A. M. on the morning of Thursday, August 12th, by shooting himself with a Deringer pistol, the weapon having been placed in the mouth and directed upwards. The ball passed through the palatine process of the superior maxillary bone, and crushed to the extent of its own diameter the base of the vomer, when its progress was arrested. It then fell back through the right nostril into the pharynx, was swallowed and discharged per anum by the action of a purga

tive, on the morning of the 14th inst. The hæmorrhage was profuse; he must have bled at least 50 or 60 oz.

The supposition must be, that a large portion of the powder with which the pistol was originally loaded, had escaped by the sides of the ball before it was discharged, thereby protecting the patient from instant death. R. T. M.

[We think with Dr. Maxwell, that from its singularity the case is worth publishing. One of the most interesting features of the case, however, was the impossibility for a surgeon to form any idea as to the locality of the bullet, until discharged per anum.] Eds.

REPORTS OF SOCIETIES.

ACADEMY OF SCIENCES.

At the regular meeting of the Society, 2d ult., seventeen members were present—Dr. Blake in the chair. Mr. Gale presented a specimen of the star fish, to compare with another specimen which had been injured. The same gentleman also presented several specimens of fossil shells from Treasure Hill, White Pine.

Mr. Murray, of Humboldt County, presented an Indian instrument made of serpentine, taken from a gravel bed in Klamath County, also several stone relics, found on the coast in Klamath County.

Dr. Gibbons presented some apples from Alameda County, of the growth of 1868, which had lain out of doors exposed to the weather, beneath the oak trees, since last November, a period of nine months, perfectly preserved. Specimen sheets of Mr. Elliot's work on Birds of North America, not hitherto described, one hundred and seventeen in number, were presented to the Academy. A general discussion followed, during which a member stated that the stone implements found in the mounds and old burial places of the Indians furnished no evidence of great antiquity, either of themselves or the persons who had fashioned them, as the same character of implements were in use at this day among the tribes of Indians who inhabit the country about Puget Sound and east of the Sierra Nevadas. Dr. Gibbons stated, as an evidence that the mound builders had no knowledge of metallurgy or the combination of metals, there never yet had been taken from the mounds of North America an implement of any kind composed of any material except stone or iron. He said there had been found in some of the mounds of the Southern Pacific coast articles of jewelry composed of virgin copper, covered with thin sheets of silver, but no specimens of bronze or other combination. The Chairman announced that the Society was now out of debt for the first time since its organization, and that they would now be enabled to reorganize and improve their museum. After some further discussion, the Society adjourned.

BIBLIOGRAPHICAL NOTICES.

A Manual of Elementary Chemistry, Theoretical and Practical, by George Fownes, F. R. S., from the tenth revised and corrected English Edition. By Robert Bridges, M. D. Henry C. Lee, Philadelphia, 1869.

This is a thoroughly revised edition of this standard manual of chemistry. The chapter on General Principles of Clinical Philosophy, has been re-written, as well as the greater part of Organic Chemistry, which was rendered necessary by the rapid progress making in that branch of the science. It is a high testimonial to the value of this work that since the issue of the first edition in 1847, it has passed through ten editions in England.

It is a subject of regret that this manual, which is indispensable to the accomplished chemist, could not be the standard work in our high schools and colleges in California. Its cost is but little, if any, more than the manuals of mushroom growth, that are constantly finding place in the academic curriculum. The multitude of text books that are invented to supply different grades of pupils pursuing the same branch of knowledge, is a serious charge upon the small means of a large proportion of parents. A text book should, as far as possible, teach the pupil from the simplest elements to the most advanced topics that he can attain in a university course; and there is no good reason why he should be required to purchase Steele's Chemistry in the academy, and Fowne's in the university. For sale by A Roman & Co.

Our Home Physician: A new and popular guide to the art of Preserving Health and Treating Disease, with plain advice for all the medical and surgical emergencies of the family. By George M. Beard, A. M., M. D., etc., etc.

The above is the title of a work, the advance sheets of which we have received from the publishers, E. B. Treat & Co., 654 Broadway, N. Y.

From a hasty perusal of the work, we are disposed to think that it is much superior to the majority of works purporting to be "Medical Guides" for the people. The subjects of which it treats are not only handled philosophically and comprehensibly, but can scarcely be better chosen to convey the information that the people require.

California Medical Gazette.

SAN FRANCISCO, SEPTEMBER, 1869.

☞ *All Letters and Communications to be addressed to the "Editor California Medical Gazette, care of A. Roman & Co., San Francisco."*

ABOUT HOSPITALS.

For nearly twenty years California has been a State in the American Union. Its population is estimated, at this time, at about half a million; but no estimate has ever been made of the number of men who, at various times during that period, have made their home within its borders. California has been a vast hunting-ground, where adventurers from all lands came to fill their game-bags and go "home." The proportion of those who came to claim this as their own land and the home of their children is small, and many even of that small proportion are reconciled to remain here, from the necessity of their position, until early attachments are finally broken.

Thousands have been enriched by the wealth of the State, and have departed without leaving any memento of their gratitude or token of their sympathy for the less fortunate. New York, Boston, and indeed every city of the Eastern States, and most of those of Europe, abound with successful men claiming to be Californians, who spend abroad with a lavish hand what they received with as lavish a generosity from our prodigal State. Enough wealthy ones remain, whose colossal fortunes bid fair to exceed their own expectations, and whose princely hospitality in some cases is as extreme as the niggard meanness of others. Wealthy guests from abroad are feasted, wined and toasted until the whole Orient beams with laughter at the dis play of our drunken prodigality. Emigrant Aid Associations are organized, and the language of panegyric is exhausted to paint, not too vividly, the charms of our Western Coast, to draw to us the industrious and enterprising population of crowded States; but no provision has ever been made to shelter them from the consequences of sickness that is liable here as elsewhere to meet them at the threshold. There is not, and never has been, a noble generosity in California. There has been much reckless extravagance, but the mind gropes painfully through the darkness of the past for one illustrious example of generosity. Those scatter freely who hope to reap fully. The heart sickens at the recollection of the scenes of misery that haunt the memory of manhood broken at the wheel of fickle fortune—broken in health, purse and hope. We evoke from their nameless and numberless graves the unfortunate ones that have fallen by the way when overtaken by disease, and the weapons of industry have been stricken from their hands; from every mountain cañon, valley and village graveyard, from Lone Mountain and a hundred unnamed cemeteries, comes the reproach that will go down to history—that not one dollar has been contributed towards the endowment of a public hospital; that not one grain of her golden sands has stopped on its way to gild distant shrines, to lay the foundations of a temple in California devoted to the first of the Christian graces. There is at this day no public asylum in the State for the reception of sick and destitute strangers. They languish in boarding houses and private families, often badly cared for, incurring debts that years of industry will be required to liquidate, if it is ever done, or until death mercifully comes to their relief, sometimes by their own hand when their disease is chronic and hopeless.

The expense unavoidably attending sickness, to those who possess moderate means, is a serious drawback to the prosperity of the State. There probably never was a people so poorly provided with hospital accommodations, or one amongst whom they are so much needed. Our population is probably the most cosmopolitan of any on the globe: it is a social mosaic, composed of fragments of families gathered from every people under the sun. Never was there a State with so large a proportion of its population without homes or kindred to shelter them in the hour of their greatest need. Witness the restaurants and the multitude that rarely know any other homes.

In all communities deserving to be called civilized, the earliest and best supported charities are public hospitals. In Spanish colonies the hospital was cotemporaneous with the house of worship; and the Roman Catholics, wherever found, have taken the lead in this special display of Christian benevolence.

San Francisco and other of the principal cities in the State have made some provision, such as it is, for their own indigent sick; but a residence is required for admission. To this city invalids congregate from all parts of the State, as to the pool of Siloam, to be healed, where they generally fall into the most unworthy hands, who take what little means is left them, when, if their disease continues long enough for them to acquire a residence, they are sent to the City Hospital, to which nothing but extreme friendlessness and poverty could drive them.

The French, Germans, Italians, Irish, Portuguese, Chinese and almost every nationality represented amongst us have their associations for mutual relief, and most of them very well conducted hospitals for the benefit of their members; but the great Protestant American people, with all their achievements in developing the resources of the country, opening up the vast system of communication with the rest of the world, the energy of whose pulse is felt as far as California is known, are disgracefully remiss in their obligations to humanity. What is needed is a general hospital that shall be accessible to the sick from all parts of the State, as well to the stranger within our gates as to the citizen.

Sir James Y. Simpson, in his address to the "Society for the Promotion of Social Science," disapproves of large edifices for hospital purposes, and recommends a large number of small ones, of cheap construction, of wood, of the kind used by our army during the late war. This suggestion has greater force in a climate like ours, where severe winters are not to be guarded against. It should have ample grounds, adorned by the gardener's skill, with perfect drainage, space for the erection of a sufficient number of one or at most two-

story wooden buildings, neat, well-ventilated and furnished with the luxuries of a home, where the sick may find all that can mitigate the tedious days and nights of convalescence, or soothe the anguish of despair and death. It should be such an institution that one, whatever his social position, could find more desirable than any place that might not be his home, and to those able to pay for their maintenance a charge could be made sufficient for that purpose.

What an enviable opportunity is there for an honorable fame to some wealthy citizen of California by the endowment of such an institution in our midst, which, like Guy's Hospital of London, should hand down to the remotest posterity its beneficent founder.

We must not look to State Government for action in such matters. It may be doubted whether charitable institutions, under political management, are not productive of more harm than good. As a general rule, it has proven so in America, and they have never been creditably managed until they have been placed under the control of a Board of Directors, chosen for their fitness for the trust. Under such management positions as medical officers would be sought by the best class of medical men, as honorable; for merit would constitute a test of qualification, and a corps of physicians and surgeons might be organized capable of advancing the cause of medical education, as well as affording the best services to the sick. Without such an institution, placed beyond the reach of the pestilent touch of politics, it is useless to attempt a school of medicine in California. Clinical instruction in the wards of a well-conducted hospital are as essential to instruction in practical medicine and surgery as a laboratory is to the acquisition of a practical knowledge of chemistry. Young men of honorable ambition, seeking a knowledge of the healing art, will go where these facilities are furnished, and those who are without the noble impulse are sure to turn out charlatans, who will follow the profession as a trade, and aggravate the evils under which the people of California already suffer too much.

OUR CORONER.

The office of Coroner is one the importance of which is not fully appreciated by the public.

The health department of the city government is supposed to protect us, as far as public sanitary measures can, from the ravages of disease, but it is to the efficiency of the coroner alone we must look for protection to our lives from secret murder and criminal carelessness, by instituting the most vigorous investigation into the circumstances attending every death occuring in his jurisdiction, concerning which there has arisen a well founded suspicion of guilt.

It is an office in which medical men are specially interested, for medico-legal questions are generally involved in the exercise of the functions of the office. For manifest reasons, the physician is usually chosen to the position, and if these reasons are valid, it is proper that an educated one should be chosen; it is not enough that he be a doctor, he should possess more than the average intelligence of the profession, and one who can discriminate well enough to call to his aid the best talent in the profession when needed, who possesses a love of justice and energy of purpose that will leave no stone unturned to bring to light what is obscure, and with a moral courage that no personal consequences can intimidate.

It is a thing to be desired that the powers of the Coroner be increased, his arms are not long enough—look at the mortuary reports and say if causes of death are not there assigned that call for his investigation. One is said there to have died of toxemia which means *poisoned*,—by whom, or by what is left for conjecture. That there are more deaths from *toxemia* in this city than there is a necessity for, there is no doubt in the minds of many. Look at the number of drug stores whose colored lights fill the city at night with a net work of rays red and blue; look at the number of irresponsible quacks that throng the city, and wonder that the mortuary record should show so many deaths from *toxemia*, *anœmia*, *inanition*, *atrophia*, *merasmus*, and so on.

The appreciation of the importance of the office of Coroner may be illustrated by an incident of the early days of California. The first election under the State Constitution had just been held in an interior town. Candidates had not been selected by conventions as now, but each man desiring an office announced himself through the papers, and by circulating his printed card. A certain hospital retainer known as stuttering Pete was a candidate for Coroner, and for a day or two after the election it was thought that Pete was successful by about forty plurality, but when the official vote was announced it proved that he was beaten by a few votes, " w-w-well " said Pete after the full conviction of the truth of the case had fastened upon him, and with his bosom swelling with disappointment and indignation " w-w-well they may b-b-b-bury their own dead and b-b-b-be damned."

It is with some such conception of the duties of the office that many in times past have sought

the office in this city. It has been considered as a good *berth* in which some amiable gentleman might be permitted to lie down and rest, rather than as a post of duty demanding untiring industry. Indeed, the duties devolving upon the Coroner in this city at the present time, require that two districts should be organized with a separate Coroner for each.

WONDERFUL.

Often when reading a startling announcement in the public press of some sudden or mysterious death—spontaneous combustion, for instance—or of some young lady being in a trance for several months, or having lived a year or two without food or drink, we have thought it strange that such nonsensical or absurd stories should be copied from journal to journal. Generally such novel and miraculous circumstances, like fever and ague, occur somewhere else, never in any immediate vicinity; the truth of which, however, can always be vouched for by several most respectable persons. The only difficulty in verifying the story, is in finding one of the respectable individuals.

As an illustration of the truthfulness of such reports, we copy the following, *verbatim et literatim*, as found in our city press, and which will, no doubt, be largely copied, with variations:

A SINGULAR DEATH—A LADY, WHO IS STUNG BY AN INSECT, DIES FROM THE WOUND.

On Saturday evening, Mrs. Gustav Reis was sitting in her parlor engaged in conversation with several friends, when she was bitten on the face by a fly. The wound was very slight, but at first it gave the lady intense pain, and a physician was summoned, but before his arrival the pain had subsided, and for the time being Mrs. Reis forgot all about the occurrence. On Sunday morning, however, her cheek was very much swollen, and the pain continued to increase until evening, when she became insensible and continued so until she breathed her last during Sunday night. Mrs. Reis was born in New Orleans, La., and at the time of her death her age was twenty-five years, nine months and ten days. She was a daughter of Colonel J. W. O'Neal, of San Joaquin County, and her untimely and singular death has cast a gloom over a large circle of friends.

On Sunday evening, August 15th, Mr. Reis called and asked us to see his wife, who, he said, was thought to be dying. A few minutes after arriving at the house, Dr. McNulty also came in. We found Mrs. Reis extremely exhausted, nearly pulseless, but perfectly conscious—could understand and answer questions. The history that the father, mother and husband gave us of the disease was as follows: On Monday, the 8th inst., Mrs. Reis had pressed and irritated a small pimple that appeared on her chin, and afterwards went out into the cold. Next day, Tuesday, there was swelling, inflammation and pain where she had pressed the pimple. Fearing an attack of erysipelas, or something serious, as they said, they sent for their family physician, who, no doubt, to quiet their fears, told them not to be alarmed, that it was only a sting from an insect.

The inflammation and swelling continued to spread, as in ordinary cases of erysipelas, and the woman continued to grow worse, notwithstanding her physician had employed such measures as he thought necessary, until Monday morning, 16th ult., at 4 o'clock, when she died.

There was nothing that we could see in the origin, progress, duration, termination, or appearance of the disease that differed from hundreds of other cases of erysipelas; and we can assure those of the fair sex who are nervous about the circumstance, that they are in no more danger of being stung by poisonous insects in San Francisco than they ever have been.

THERAPEUTICS.

There are few of our exchanges that we appreciate more highly than the *Medical and Surgical Reporter* of Philadelphia. And it is only necessary to be a reader of its columns, to be convinced that its editors are gentlemen not only capable, but whose earnest desire is, to sustain the dignity, and advance the interest of the profession. At the same time we beg leave to offer it, as our opinion, that its "Therapeutic Bulletin" is of very doubtful utility, however much it may add to the popularity of the journal.

We are assured that only such receipts shall be collected as are remarkable for their novelty or elegance. Why a prescription should be recommended to the profession, or rather given to a patient because it is novel, we do not know. We generally, for our own part, are governed in the selection of our remedies, by their efficacy. In most of the recipes given in the number (July 31,) now open before us, we fail to see either the novelty or elegance of most of them.

R. 184, for instance, consists of dilute nitric acid, syrup of ginger, and water, which, we are told, is "especially useful in erysipelas when the typhoid symptoms predominate." This preparation may be elegant, and to depend upon it as treatment in erysipelas when typhoid symptoms predominate, we grant, would be considered rather novel now. When such cases of erysipelas come under our care, we generally find that tincture of iron and quinine made *elegant* by adding glycerine and syrup; also brandy and beef-tea are all indicated, and generally all necessary to bring such cases to a happy termination.

℞. 187. Quinæ Sulphatis, - - - gr. ii.
Acidi Muriatici diluti, - - m. x.
Tincturæ ferri chloridi, - - m. xv.
Infusi Columbæ, - - - f. ℥ ss.

For one dose in water, ter die. This preparation is also recommended by Dr. Aitken, particularly in the treatment of diphtheria.

When we take into consideration that our tincture of iron is generally already too acid, and that the 15 drops is quite sufficient to dissolve the gr. ii of quinine, and that the majority of cases of diphtheria occurs in children, whose stomachs the additional amount of acid is the more apt to offend, why add the acid? Again, why administer it in infusion of columbæ? Why not syrup? It is not for the bitter that it is given. We are very much afraid that the fact of its being recommended by Doctors Tanner and Aitken, will not make it any more acceptable to the little patient.

It was not our intention, however, to find fault with the recipes given, but with the principle of recommending certain prescriptions for certain diseases. Nothing can be more pernicious to the young practitioner—a purely imperici is the result of such teaching.

A Therapeutic Bulletin ought to give a full explanation of the pathological indications for each medicine in the recipe. It ought to teach the medical man to prescribe for the pathological condition, and not for the disease. For instance, in diarrhœa we should prescribe for the particular pathological condition of the bowels, and not write a diarrhœa recipe, that some doctor used effectually under altogether different pathological conditions. Of all doctors, we consider the apothecary doctor the most dangerous, and simply because he is always ready with a recipe for every disease, without the knowledge to prescribe for the particular pathological condition of the patient.

CALIFORNIA PHARMACEUTICAL SOCIETY.

At a recent meeting of the Druggists and Apothecaries of this city, a society was formed, called as above.

The objects of the society are expressed in the following extracts from the constitution:

"To improve the science and art of Pharmacy, by diffusing knowledge among Apothecaries and Druggists, fostering pharmaceutical literature, developing talent, stimulating discovery and invention, and encouraging home production and manufacture. To establish the relations between Pharmaceutists, Druggists, Physicians, and the people at large upon just principles, which shall promote the public welfare and tend to mutual advantage.

"To confer together at stated periods, for the purpose of a general supervision of the drug business, of social and scientific culture, and to establish harmony and a friendly spirit among its members.

"To stimulate the younger members and apprentices to a proper course of study, so as to prevent the evils flowing from deficient training, in the responsible duties of preparing, dispensing and selling medicines."

The next meeting will be held in September, for the election of members and for the nomination of officers. Upon the rules for admission of members, will depend the interest that the society will have for the profession and for the people of San Francisco.

If the mere fact of being proprietor of a drug store, entitles the individual to become a member of the society, then the profession and people at large have no further interest in the California Pharmaceutical Society, other than the earnest hope that many of its members may improve in the science and art of Pharmacy. To establish the regulations between Pharmaceutists, Druggists, Physicians, and the people at large upon just principles, which shall promote the public welfare, it is necessary that only such Druggists shall be admitted as members of the society as are competent men. To be a member of the society should be a guarantee to Physicians and people, that the individual is a qualified and reliable Druggist.

Pursue the opposite course, and admit the qualified and unqualified, and many of the better qualified Druggists will keep aloof from the society, while the people will be at as great a loss as before to know who are the qualified Druggists.

Memorial to Faraday.—At a public meeting held recently in the theatre of the Royal Institution—His Royal Highness the Prince of Wales in the chair—to consider what means should be taken to raise a monument to Faraday. There was a large and very distinguished attendance, including, amongst others, M. Dumas (who had just received the Faraday Medal of the Chemical Society), Sir John Lubbock, Mr. Graham, General Sabine, Sir Henry Holland, Dr. Lyon Playfair, M.P., Sir Benjamin Brodie, Dr. Bence Jones, Professor Owen, Professor Miller, Mr. Cæsar Hawkins, and Professor Frankland. His Royal Highness expressed the pleasure he felt in presiding over such a meeting. Three resolutions were proposed and unanimously carried: That a public memorial be provided; that a committee be elected to take measures for the provision of the said public memorial (the names of the members of committee, most of them presidents of learned societies, were mentioned in the resolution); and that a subscription, not exceeding five guineas in amount from any one person, be made.

QUEER SYMPTOMS.—A patient suffering the consequences of the opium habit, recently described his symptoms in the following words:—

"I can compare the sufferings incident to the opium habit to nothing less than *a compound—double-distilled and highly-concentrated extract of rheumatism, gout, neuralgia and itch; with head-splitting—stomach-nauseating—intestine twisting—limb-tearing agony.*"

GYNÆCOLOGICAL NOTES.

At a late meeting of the New York County Medical Society, Dr. Emmet said, in reference to division of the cervix, that "scarcely any operation in surgery, however, has been proposed, where so little judgment, as a rule, has been exercised, and where so frequently its indiscriminate performance has even amounted to malpractice." The cases, in which Dr. Emmet now finds incision of the cervix necessary, are very limited.

In course of the discussion, which followed the reading of Dr. Emmet's paper, Dr. Noeggerath remarked, that—

"We must certainly welcome an avowal of these principles, by which the operation of incising the neck is reduced to very restricted limits: It denotes a most unmistakable progress in American gynæcology. This change of view regarding the indications for surgical treatment is the more noticeable and important, because professed by a man who has usually been considered one of the principal advocates of the purely surgical treatment of uterine diseases."

Dr. Peaslee thought that gynæcology had certain eras: as the nitrate of silver era, the pessary era, and the cutting era. Said he:

"Three years ago, I said before the State Society, that incising the neck for flexions of the uterus, is like tinkering in the basement of a building for leakage of the gas-pipe in the upper story: and I am happy to find this idea confirmed this evening."

Dr. Isaac E. Taylor thought that surgery of the cervix had been carried to great excess, and that the operation had not been as effective as had been reported.

Dr. Geo. T. Elliot hoped to see the operation of incision confined to still narrower limits than those defined by Dr. Emmet.

We also find in Dr. Sims' paper, on "The Microscope in Sterility," the following:

"For myself, I am now sure that I have cut open the cervix uteri, perhaps scores of times, when it was both useless and unnecessary, and I know that others have done the same thing."

The profession is perfectly prepared for the above startling announcements, viz: that "the cases for which incision of the cervix is really necessary, are limited;" and "that there have been scores of cervix uteri cut open, when it was useless and unnecessary."

We only hope that their condemnation of their hobby-horse, as useless and unnecessary, will have the effect of preventing other ambitious spirits from astriding the uterus, and, with speculum and lancet, spying and cutting their way to fame.

In the August number of the *Gynæcological Journal* of Boston, Dr. Warner expresses himself as preferring to use caustic in the uterine cavity, to injections; and highly recommends the flexible caustic holder invented by Prof. Byford of Chicago, for that purpose. Dr. Bixby believes that uterine injections should be resorted to only upon very exceptional occasions, while Dr. Storer informs us that he has almost entirely relinquished the use of uterine injections,—preferring the caustic in local applications by the swab.

We also have a report of the fourth regular meeting of the Gynæcological Society, a pathological specimen,—the case being one of *discharge of hair from within the bladder*, of a female aged 36, unmarried. She suffered pain in lower bowels for many months past, with both vesical and rectal tenesemus.

Six months ago passed lock of hair from within the bladder, covered with calcareous concretion. Dr. Storer suggested at the time that there might be ovario-vesical fistula. There was subsequently eight or ten locks spontaneously discharged. Dr. Bullard had also removed from within the bladder half a cup full of hair.

The patient finally died of diarrhœa, and an autopsy was made.

The uterus was slightly enlarged, indurated and sharply anteflexed, coats of rectum hypertrophied, also those of bladder. It had contained two large calculi; have hair as nuclei. One stone occupied a sacculus at the upper and posterior portion of the bladder, between which and left ovary there was a small, tortuous fistula. A loop of small intestine, also adhered to bladder, and small fistula existed, but no report of feculent matter through the urethra.

Dr. Storer briefly referred as interesting in this connection, where he had removed from within an ovary, by way of the uterus, through a fistulous connection between those organs, a long lock of reddish hair, which he exhibited.

Dr. J. B. S. Jackson being present, asked concerning the frequency of fibrous tumors, and as to the propriety of attempting surgical treatment for uterine fibroids, and remarked upon the grand errors of diagnosis that had been committed. He instanced an operation performed in that city many years ago, supposed to have been ovarian, but was

actually the uterus itself, enlarged by fibrous tumors.

Dr. Storer thought unnecessary interference with uterine fibroids was to be deprecated, but that occasionally surgical assistance is indicated, as he had but little confidence in medicine in such cases. Quiet fibroids should be left alone. Three years ago he had removed the entire uterus, weighing thirty-seven pounds, by abdominal section, and that the woman was in his office a few days ago in perfect health.

The *Journal* contains an engraving from a "stereoscopic photograph, taken from a cut through the pelvic organs of a well formed virgin, of about 20 years of age," sent to the Society by Prof. A. Breiskey, Berne, Switzerland, a corresponding member of the Society.

Dr. Pinkham, Lynn, Mass., read a paper before the Society, showing that Dr. Storer was the first to suggest and bring intra-uterine scarification prominently before the profession.

SURGERY.

CASE OF SPINA BIFIDA OF UNUSUAL CHARACTER.

By Randle Buck, L.R.C.P., M.R.C.S., Inkberrow.

Mrs. F. D. was delivered of a female child on July 4th, 1868; the labour was in all respects a natural one. After securing the umbilical cord, my attention was attracted to a peculiar appearance in the back, which, on closer inspection, proved to be spina bifida, but presenting these curious features: The child lying on its face, there was before me in the lower dorsal region, what, at first glance, looked like a blister produced by cantharides, perfectly circular, and measuring three and a half inches across it. Down the centre, the spinal cord was plainly visible; it seemed raised out of its canal and adherent to the sac, which was distended with fluid. I applied a light bandage and placed the child on a soft pillow, on which it might be carried. The spinal cord being so little protected, I thought death would soon take place. There was a small escape of fluid from the sac, so that the bandage in a few hours became saturated.

The child continued in this state till July 30th, when the escape of fluid above mentioned ceased, and in a few days the head (which had hitherto been of natural proportion) began to increase in size, the sutures became widely separated, the frontal bone very prominent, the eyes depressed and squinting. From this time up to death, on November 8th, both head and sac gradually increased in size, the sac discharging some fluid at intervals. When this occurred, the head diminished in proportion. The circumference of the tumor was 11½ inches; of the head, 19 inches. Examination twenty-six hours after death, the sac consisted of epidermis and membranes of the cord; contained a very large quantity of cerebro-spinal fluid, and three inches of the spinal cord with nerves adherent to the sac. The spinous processes of the eleventh and twelfth dorsal and first lumbar vertebræ were missing.

I should mention that, for some time before death, the child was completely paralysed, but there were no convulsions.—*British Med. Journal.*

PRACTICE OF MEDICINE.

DIPHTHERIA AND ITS RELATIONS TO MEMBRANOUS CROUP.

At a recent meeting of the Essex North Medical Society of Massachusetts, Dr. John Crowell read a paper upon the above subject, of which a brief abstract is presented below:

In its pathology, diagnosis and principles of treatment, diphtheria may be ranked among the modern diseases. Yet, from the writings of old physicians, we are certain that it existed and prevailed extensively at different times in the sixteenth, seventeenth and eighteenth centuries. It broke out in epidemic form in France in 1818, and was described by Butormeou under the name of diphthérin, in Mémoires communicated to the "Académie Royal de Médicin," in 1821, About the same time, also, some cases seem to have occurred in Scotland, and a few in England and in this country. But only slight attention was given to the subject until the outbreak of the epidemic at Boulogne, in January, 1855.

In England, the first epidemic cases were minutely observed in the year 1856, and the attention of the profession was directed to the disease in this country at about the same date.

We speak of the disease in its distinctive and positive character, as it invades the soft parts of the throat with the peculiar grayish-white, leathery exudation, invading the system with its poisonous influence. No portion of the mucous surfaces is exempt from the exudation. It may be formed on abraded cutaneous surfaces, on the conjunctiva, on the vaginal mucous coat, or the lining membrane of the rectum. Under the microscope, the diphtheritic exudations will be found to consist of molecular particles, epithelium, pus cells and blood corpuscles. Fibrillæ are but rarely seen. The *oidium albicans* may occasionally be detected, but the occurrence of this fungus is only exceptional, and when the membrane has begun to undergo an acid putrefaction.

The most insidious phase assumed by the disease is when the air-passages directly communicating with the lungs become involved, producing the physical signs peculiar to laryngitis, bronchitis, congestion and membranous croup.

Dr. C. cited five cases that had come under his observation where the local signs of diphtheria had disappeared, and the patients were apparently convalescent, when all the physical signs of membranous croup suddenly supervened, resulting in death from asphyxia in each case.

The general principles of treatment were then discussed, reference being made to the plan adopted by Dr. Cox, of Ohio, during the prevalence of the disease in epidemic form in several sections of that State, a few years since. This *sustaining* treatment is now generally adopted by the profession.

When the exudation invades the larynx, producing the croupy complication, the treatment indicated is similar to that adopted in membranous croup. The authority of Dr. George Buchanan, of the Royal Infirmary, Glasgow, was cited in favor of tracheotomy in all cases where it would be justifiable in membranous croup. Dr. Buchanan has saved about one-third of the cases operated on in this form of the disease.

Dr. Bennett, in his valuable "Clinical Practice," strongly advises the adoption of the method of Dr. Horace Green, of New York, of applying topical remedies directly to the fauces, larynx and trachea. Dr. E. Nutson, of Glasgow, and Dr. Bennett have both employed this method with good results.

Strong solutions of argent. nit. are used, as these act chemically on the mucous, pus or other albuminous fluids they come in contact with, throw down a copious white precipitate in the form of a molecular membrane, which defends for the time the tender mucous surface or irritated ulcer, and leaves the passage free for the act of respiration.

The conclusions deduced from this argument were—

1st. "That the diphtheritic exudation, invading the larynx and trachea, produces physical results similar to those of membranous croup."

2d. "That *practically* there is no essential difference in the pathology of the two diseases."

3d. "The principles of treatment in both conditions are identical in their practical application."

In the discussion which followed the reading of this paper, the opinion of Dr. J. R. Nichols was called for in regard to the relative chemical analysis of the membranes formed by the two conditions of disease. Dr. Nichols remarked that he was not prepared to give an accurate analysis of the diphtheritic exudation, but he felt convinced that it was wholly unlike that of membranous croup—the former being albuminous, and subject to speedy decomposition; while the latter was fibrinous and more tenacious, and unyielding to the inflammatory action. He did not like the term "diphtheritic croup," as diphtheria and croup were entirely distinct diseases, the former to be classed as *zymotic* in its nature, the latter not.

Dr. Garland contended that the physical signs in the croup complication of diphtheria were unlike those of true croup; that the patient died of exhaustion rather than by asphyxia. According to his observation, the croupy signs in diphtheria ceased before death; whereas, in true croup, they continue to the last. Croup is a disease peculiar to childhood; diphtheria, in all its phases, attacks all ages. Diphtheria is confined more especially to the poor and destitute, and dependent upon local causes; croup attacks families in the most favored localities, and seems to have no relation to local causes. Dr. Howe was of the opinion that the croup, in diphtheria, was simply accidental, and had no pathological relation to the disease.

Dr. Drinkwater contended that whatever produced the physical phenomena of croup might properly be called croup. He would call the croup of diphtheria membranous croup, although the chemical structure of the two membranes might be unlike.

This view was favored by Drs. Flint and Johnson.

The discussion was continued to some length, and the facts adduced in illustration of the positions were interesting and instructive.—*Boston Journal.*

BROMIDE OF POTASSIUM IN TETANUS.

By George Derby, M. D., of the City Hospital, Boston.

A Portuguese carpenter, 44 years old, fell from a staging, May 12th, 1869, producing a fracture of the right thigh, in which crepitus was found at two points six inches apart, with much shortening before extension was applied. There was also a slight scalp wound. This man was, during the first week, in a depressed, lethargic condition, answering when roused, disinclined for food, frequently moaning, although denying pain, and with a very feeble pulse. Pupils responding to light. On the eighth day there was first remarked an inability to open the mouth fairly, accompanied with iffness of the neck. Next day the trismus had become very marked, so that the jaws could only be separated about a quarter of an inch; there was also œdema of the neck and of the left side of the face, with an erysipelatous blush behind the ear. The head could not be moved without causing great suffering. This state of things continued four days, the patient being fed every hour with small amounts of milk, beef tea and wine, alternately. He also took one drachm of solution of morphia every six hours. On the sixth day from the occurrence of trismus there was an improvement in all respects, which continued from day to day until, on the 1st of June, all tetanic symptoms had disappeared.

The next case was of a carpenter, 17 years old, admitted June 6th, 1869. He reported that, two weeks previous, the base of great toe of left foot was punctured by a nail, and that, three days after, he had painful stiffness of the jaw, neck and back, which had continued to grow worse. Examination of foot showed only a slightly red point at the place he had indicated.

His condition was one of well-marked general tetanus. Opisthotonos. Neck, abdomen and legs rigid. Movements of arms quite free. Jaws could be separated only about a quarter of an inch, but patient could swallow. Sardonic grin very marked. Pulse 130. Bowels constipated. Occasional spasms, causing the patient to cry out. He was ordered one drop of croton oil, to be repeated if necessary, and to be followed by liq. morphiæ ℥ii. every four hours, with beef tea and whiskey at short intervals.

June 8th.—Condition rather worse. Convulsions more frequent. Trunk as rigid as if frozen. Legs immovable. Abundant sweating, accompanied by a miliary eruption. No effect from three drops croton oil. Enema tube could not be forced through the sphincter, except under ether. Could still swallow and use his arms. He was ordered bromide of potassium ℈ii. every hour, continuing beef tea and whiskey, and omitting morphia. The next day a slight improvement was noted. Convulsions were less frequent, and the legs could be flexed by using a good deal of force. The pulse had fallen to 65, at about which point it subsequently remained. The intelligence was dull, but the patient took his food and medicine without much difficulty. From this time the amendment was progressive, convulsions ceasing entirely, and the rigidity of neck, back, jaws, legs and abdomen diminishing daily, and for the most part in the order named. As this improvement continued, the bromide of potassium was given less and less frequently, until July 1st, when it was omitted entirely. The amount taken during twenty-one days was not far from twelve ounces. During the first two days two scruples were given forty-two times. The only effects observed, other than a subsidence of tetanus, were dullness of the intellect and slowness of the pulse. On the 4th of July the patient was discharged, well.—*Boston Medical and Surgical Journal.*

ON THE INJECTION OF AMMONIA INTO THE CIRCULATION.

At the April meeting of the Medical Society of Victoria, under the presidency of Dr. Bird, Professor Halford read an interesting paper on the "Injection of Ammonia into the Veins," with the object of demonstrating the perfect safety with which ammonia can be injected into the circulation, not only through the medium of the veins, but directly into the heart. Professor Halford detailed a series of experiments of a highly interesting character recently made by him, in which vital reaction had been shown to be the certain conse-

quence of the employment of this alkali by injection. The "foolish temerity" with which the possibility of doing this safely had been denied by persons who had never attempted the experiment themselves, was severely commented upon in the course of the discussion, and the value of Professor Halford's discovery was pointed out as bearing upon the treatment of all affections in which a powerful heart-stimulant is indicated; in proof of which, Mr. Fitzgerald related a case of pyæmia, in which, though death eventually took place, life was considerably prolonged by ammoniacal injection. As a means of resuscitation in syncope from chloroform, it was considered to afford a most valuable resource, and Mr. Gilbee stated his intention of employing it on the first favorable occasion. Professor Halford's paper did not entertain the question of the manner in which ammonia acts in antagonizing the influence of snake and other poisons. That part of the subject, he stated, he reserved for a future paper. A letter, however, was read by Dr. Neild, from Dr. Day, of Geelong, in which the action of snake virus and other similar poisons was shown to be ascribable to their power of paralyzing the sympathetic nerve, and the effect of the ammonia traceable to its intense power of exciting muscular contractions.—*Lancet*, June 19, 1869.

HYDATID CYSTS OF THE LIVER.—THE IMPORTANCE OF THE VIBRATION AND MUSICAL NOTE IN DIAGNOSIS.

Dr. Keyes presented to the New York Pathological Society, on behalf of Dr. Van Buren, a quantity of hydatic cysts of the liver, discharged per rectum. In regard to the question of diagnosis, an important point came up for consideration, having reference to the existence of the hydatid vibration and the musical note described by Rayer and Briancon. None of the gentlemen present at the first examination, after the most repeated and careful trials, were able to make out the existence of either. In this connection Dr. Keyes stated that Briancon, who refers to the existence of the vibration and musical note as important, if not pathognomonic symptoms, had made a number of experiments with bladders partially filled with fluid and hydatid cysts, and had found than when the hydatids were slightly in excess of the fluid, the vibration and musical note were most distinct, but that they increased intensely to absolute disappearance, in proportion to the relative excess of the fluid. The examination of the contents of the cysts by the microscope disclosed nothing but the presence of the hooks of the echinococcus. The fluid contained no albumen.

THERAPEUTICS.

BROMIDE OF POTASSIUM.

This is a new medico-chemical agent, which has got into the fair path of advancement, as one of those *catalytical* or unknown remedial agents as to how it acts in the numerous affections in which it is extolled, as either a palliative or a cure. Dr. Sidney Ringer, professor of therapeutics at University College, in a lecture, given in the *Lancet*, March 20, enumerates the many affections in which it may be employed, with more or less advantage, including, generally speaking, convulsions of all sorts, and, so far as we can discover from going over the paper, about fifty diseases and collateral affections—from "teething" in infancy, to "asthma" in old age; from melancholia in mature, to despondency in old age; from "night screaming" in children, to "nightmare" in those who have supped on toasted cheese; from delirium tremens to flatulent mania; from diminished sensibility, to hyperæsthesia; and from Bright's disease to diabetes, etc., etc. The enumeration out-herods everything we ever read, even in quack bills. The ship-chandler, who deals in everything, from a needle to an anchor, has the satisfaction of knowing that all his wares can be put each to their own use; but we have now the infinite satisfaction, according to Dr. Ringer, of knowing that we have one ware which can be put to any or almost every use. With bromide of potassium, carbolic acid, or sulphurous acid *in our hand*, you may play your leading card as you like out of your best suit, which the reader will at once infer embraces the most important agents in the whole *materia medica;* but it will be trumped to a certainty by whichever of these may have happened to be the turned up card in the morbid specific deal, as the remedy against all the ills that flesh is heir to! And, say you have treated your case *secundum artem* in every way, at the consultation, mark you, even your very best card must fall to one or other of the above trumps.—*Glasgow Medical Examiner.*

MISCELLANEOUS.

MEDICINE IN ITALY.

The *Cincinnati Lancet and Observer* contains a letter from Dr. Whittaker, dated Rome, April 1st, 1869, from which we extract as follows:

"The Status of Medicine in Italy." "The spirits of Volta, Morgagui, and Scorpa might blush indeed at beholding the best positions held by imported skill, while multitudes of her students are compelled to seek instruction in foreign schools. The fine arts may still flourish in a land so replete with classical glory that inspiration may be drawn with every breath, while science pales like a plant in the dark for want of the careful hand of culture, and Italy to-day offers this singular spectacle. What could be expected of medicine among a people who but a few years ago, during the prevalence of the last cholera epidemic, in the belief that they were conspiring against the public weal, hunted down and drove out like criminals, physicians who were sacrificing their all in the faithful performance of duty?

The principal medical schools are situated at Bologna, Florence, Pisa, and Turin. The University of Bologna ranks among the most ancient in the world. Founded as early as 1119, it rapidly gathered students from all parts of the globe to the number in 1216 of ten thousand. The chairs of medicine, theology, and jurisprudence were ably filled with the talent of the land, and the reputation of the school attained a world-wide celebrity. A curious feature in its history was the occasional appointment of females of scientific renown to fill certain of the professorial chairs; and among these were Laura Bassi, on mathematics and physical sciences, Clotilde Tambroni, on Greek, Mme. Manzolini on Anatomy, and Novella Andrea, of whom it is said that she was compelled to conceal herself behind a curtain during her lectures to prevent her great personal beauty from distracting attention from her subject. It was at Bologna that anatomy was first taught in the 14th century, and it was here towards the close of the 15th, that Joseph Galvani made the discovery which has transmitted his name to all time. At present the number of students in all departments is only about four hundred.

Florence possesses a magnificent collection of anatomical models in wax, perhaps unexcelled in the world, the labor of Clement Susini and his successors Calenzuoli and Cal-

amai. The first series of chambers were filled with preparations of comparative Anatomy, the entire muscular and digestive systems, even the egg formation in all stages of developement of the chicken, were most accurately displayed with most exquisite colored preparations of the head and eyes. The rabbit, dog, and sheep were exemplified in the same careful manner in succeeding rooms, and then followed the chambers devoted to human anatomy. Osteology, syndesmology, etc., in regular arrangement, with a minuteness of detail truly wonderful. Sections of the head in every direction, exhibiting ganglions and vessels in a manner almost impossible to ordinary dissection; the various organs separately or in situ, the breast, the uterus and appendages, the lymphatics of the entire surface, etc., implying a most profound knowledge of anatomy, as well as the rarest skill. It was in Florence too, among the paintings in this, perhaps, the richest collection in the world, in a picture portraying the birth of a noble infant, that we became cognizant of the fact that the assemblage of condolers and congratulators at this interesting period was as prodigal in the days of yore as it continues to be to-day. We counted eight women, four children and three dogs in the chamber which was additionally provided with a number of statues as mute spectators of the scene.

The University of Padua, founded by Emperor Frederick II., obtained its greatest celebrity about the middle of the fifteenth century. Its great renown as a school of medicine convoked students even from Mahomedan lands. Handsome colonades were constructed in the sixteenth century on which were inscribed the names and escutcheons of distinguished "Cives Academici," and a series of statues were erected by the city in commemoration of the "Auditores Patavini," who achieved fame in after life, among whom were Savanarola, Sobieski, Tasso, Ariosto, Petrarch and Galileo. Here Harvey received his degree in 1602, Evelyn was a student in 1645, Galileo and Gugliemi were among the Professors of Philosophy, and Fallopius and Morgagni of medicine.

Genoa, a city with scarcely a third the population of Cincinnati, contains three hospitals, and also an immense Albergo di Poveri, which accommodates some 2,300 inmates.

Pisa, though sadly degenerated, still possesses the finest school in Tuscany; formerly seven hundred students congregated within her walls, now scarcely half that number. Redi, Castelli, Dempster, Malpighi, were all Professors here. In the hall surrounding her Campo Santo, which certainly should merit the name, as the court is filled with fifty ship loads of dirt imported from Mt. Calvary, there is a large, old and almost effaced painting representing the births of Jacob and Esau. The depiction of astoundment and wonder of the nurse who regards the little red and hairy arrival, is too good to escape.

Milan possesses the finest hospital in Italy, the "Ospidale Maggiore," and one of the best in the world. The vast, extensive, terra cotta faced building contains no fewer than nine courts, one of which is surrounded by a handsome series of arcades. The entire structure was erected at the individual expense of one Francisca Sforza in 1456, and has since been almost entirely conducted by private funds. Its administration has been characterized by the utmost charity, without regard to nativity, religion or means, and its dispensary distributes medicines gratis on receipt of a physician's prescription. It accomodates two thousand five hundred patients, about twenty-two thousand are annually treated.

Among the curiosities we should have mentioned, when in south Italy are the instruments found in the excavations of Pompeii. Among a collection of knives, scissors, forceps, etc., there is one of those ancient, massive, uterine dilators which consists of three steel blades at right angles to a broad, powerful screw. When the blades were inserted and the force applied, it is easy to conceive that the soft parts yielded, indeed it would be easily seen that but a slight additional turn would be necessary to dilate the pelvis too.

BIOSTATIC IMMUNITIES OF THE JEWISH RACE IN EUROPE.

M. Legoyt terminates with the following conclusions an elaborate paper on the above subject recently read before the Paris Statistical Society:

"The facts which are here collected, and which are nearly all derived from official sources, are almost unanimous in demonstrating that the Jewish race is distinguished from the other European races, in a biostatic point of view, by the following phenomena: 1. Its general fecundity is less. 2. So is it, at least as a general rule, with regard to its legitimate fecundity. 3. It is especially so with regard to its natural or illegitimate fecundity. 4. In an equal number of births there are fewer children born dead, which indicates that the Jewish woman passes through her period of gestation more favorably than the Christian woman. 5. But the most remarkable privilege of the Jews is, without contradiction, their relative low mortality, and that even when they are members of the lowest classes of society. This lesser mortality is not (and we cannot too much insist on this point) the natural consequence of a lesser fecundity, as, with an equal number of births, they count fewer deaths, and that by calculating on Halley's method—that is, in supposing the births equal to the deaths (taking place at the same ages)—it is found that they have a mean and probable life which is longer than that of the autocthonic races. It would not be correct to say that this difference in mortality is due to a large relative preponderance of adults, since in Prussia, which is the only country in which this portion of the population has been enumerated by age, there is found to be a greater number of children in it than in the Catholic and Evangelical population. 6. We have, moreover, seen that, as a consequence of this characteristic physical aptitude, the Jewish race becomes acclimatized everywhere, and propagates itself under every latitude. 7. Finally, we have shown that the Jews are possessed of a special aptitude enabling them to struggle against infected media, and protecting them against contagious diseases."

After discussing the various explanations of these immunities offered by different observers, M. Legoyt states that he believes the greater longevity of this race may be explained by the following considerations: 1. The Jews marry earlier than the Christians, and thus derive at an earlier age the advantages which statistics show are incident to the married state. Still, from their well-known prudence and circumspection, it is not to be supposed that they enter upon this until prepared to meet its exigencies. Among them hasty and rash marriages, which are alike hurtful to the health of parents and children, are rare. 2. The fecundity being less, they can pay much more attention to the preservation of their children. 3. By reason of the small number of illegitimate children they have, they escape the exceptional mortality which sweeps away such children. 4. The Jew does not pursue any calling which demands very hard labor. He is neither an agriculturist, a laborer, mechanic, sailor, nor

miner. Before all things, he is the shopkeeper, merchant, banker, artist, *savant*, man of letters, or public functionary. 5. The Mosaic law contains ordinances which, being purely hygienic, must exercise a favorable influence on the health—*e. g.*, the verification of the condition of slaughtered animals, the frequency of ablution, the practice of circumcision, and the separation of the husband until a week after menstruation, etc. 6. The strength of the family feeling among the Jews. It is only when it is absolutely impossible, and without distinction of rank, that a Jewish woman does not suckle her child. The children, too, are the objects of incessant and most vigilant care, which indeed is returned by the respect and solicitude which these manifest for their parents, especially when aged or infirm. This is probably one cause of the rarity of suicide among the Jews. 7. The sobriety of the Jews is incontestable. 8. Throughout the entire Jewish community a warm feeling of charity for the indigent and miserable prevails. 9. The religious Jew is remarkable for his great serenity of mind, and his deep-seated faith in Providence and the high destinies of his race. The constancy, the *perennite* of the Jewish temperament, is well reflected in his religious faith, which has remained immovable for so many ages. 10. The morality of the Jews, as deduced from criminal statistics, seems to be real, and is only an indication of those regular habits of life which exercise so great an influence on the duration of life.—*Med. Times and Gaz., July* 10, 1869.

BOOKS AND PAMPHLETS RECEIVED.

AUGUST.

American Journal of Dental Science; The Journal of Materia Medica; Transactions of the American Ophthalmological Society, Fourth and Fifth Annual Meetings; British Medical Journal; Transactions of the Twentieth Annual Meeting of Georgia Medical Association; Prospectus and Act Incorporating the American and Mexican Railroad and Telegraph Company; Congrè's Mèdical de Toutes les Nations 2e Sessions de 1869; The Medical Gazette N. Y.; The Chemical News,—May and June—on the Treatment of Uterine Catarrh, by Joseph Krammerer, M. D., reprinted from American Journal Obstetrics; Medical Times and Gazette; Medical Press and Circular; The Medical Mirror; Edinburgh Medical Journal; The British and Foreign Medico-chirurgical Review; Annual Announcement and Catalogue of the Missouri Medical College, Session 1869-70; The Western Monthly, Devoted to Literature, Biography and the Interest of the West; The Medical and Surgical Reporter; An Engraving of the Chicago Tribune Company's new building; The Druggist—London; Boston Journal of Chemistry; American Eclectic Medical Review; Pacific Medical and Surgical Journal; Buffalo Medical and Surgical Journal; The Pharmacist and Chemical Record; The Cincinnati Medical Repertory; The Medical and Surgical Reporter; Monthly Report of the Department of Agriculture; The Druggists' Circular; British Medical Journal; The Richmond and Louisville Medical Journal; Boston Medical and Surgical Journal; Galveston Medical Journal; American Journal of Insanity; The Half-Yearly Abstract of Medical Sciences; Nomenclature of Diseases, Journal of the Gynæcological Society of Boston; Hygiene in its Relations to Therapeutics, by Alfred F. Carroll, M. D.; Canada Medical Journal; News and Literature; Dominion Medical Journal.

MORTUARY REPORT OF SAN FRANCISCO FOR THE SECOND QUARTER, ENDING JUNE, 1869.

CAUSES OF DEATH.

Abscess of Lungs	1	Fever, Eruptive	1
Aneurism	1	do. Malarious	1
do. of Aorta	6	do. Puerperal	2
do. Femoral Artery	1	do. Remittent	3
do. Heart	3	do. Scarlet	85
Anasarca	1	do. Typhoid	9
Anemia	3	do. Typhus	3
Apnœa	1	Fracture of Skull	3
Apoplexy	16	Gastritis	4
Ascites	12	Gastro Enteritis	4
Asthma	3	Gastromalacia	1
Asphyxia	2	Hematemesis	1
Atrophia	5	Hepatitis	5
Atelectasis Pulmonary	1	Hysteritis	3
Brain, Abnormal Growth in	1	Hemoptysis	8
Bright's Disease	11	Hydrocephalus	18
Bronchitis	7	Hydrothorax	1
Burns	1	Hypertrophy of Heart	4
Calculi Vesicæ Fellis	1	Ileus	1
Cancer	2	Inanition	19
do. of Breast	2	Injuries, Unspecified	8
do. of Face	1	Intemperance	1
do. of Liver	1	Jaundice	5
do. of Stomach	2	Marasmus	41
do. of Uterus	6	Measles	2
Caries	1	Meningitis	29
do. of Bones of Ear	1	do. Cerebro, Spinal	5
do. of Spine	1	Metrorrhagia	1
Childbirth	3	Nephritis	2
Cholera Infantum	31	Old Age	2
do. Morbus	1	Opium	1
Cirrhosis of Liver	3	Paralysis	7
Colitis	1	Pemphigus	1
Congestion of Brain	6	Peritonitis	7
do. of Lungs	4	Phthisis	120
Constipation	2	Pneumonitis	35
Convulsions	37	Poison	3
do. Peuperal	1	Premature Birth	9
Croup	7	Pyemia	1
Cyanosis	6	Rachitis	1
Cynache Maligna	2	Rheumatism	2
Debility, General	15	Rupture of Blood Vessel	1
Delirium Tremens	2	do. Uterus	1
Dentition	4	Softening of Brain	6
Diarrhea	12	Stricture of Urethra	1
Difficult Birth	1	Suffocation	1
Diphtheria	26	Suicide	11
Diseases of Heart	36	Syphilis	2
do. of Kidneys	3	Tetanus	2
do. of Liver	1	do. Traumatic	1
do. Lungs	1	Trismus Neonatorum	1
do. Spine	2	Tumors	2
Drowning	10	Tumor of Brain	1
Dysentery	13	do. of Neck	1
Enlargement of Spleen	1	Ulceration of Bowels	1
Enteremphraxis	1	do. of Stomach	1
Enteritis	17	Unknown	11
Embolia	1	Variola	29
Erysipelas	1	Whooping Cough	13
Epilepsy	3	Total	895
Exostosis of Knee Joint	1		
Fever, Congestive	1		

Stillbirths.....65

AGES.

Under 1 year	207	do 50 to 60 years	57
From 1 to 2 years	73	do 60 to 70 years	21
do 2 to 5 years	90	do 70 to 80 years	11
do 5 to 10 years	63	do 80 to 90 years	1
do 10 to 15 years	14	do 90 to 100 years	1
do 15 to 20 years	17	Unknown	6
do 20 to 30 years	86	Total	895
do 30 to 40 years	140		
do 40 to 50 years	108		

SEX.

Male	538	Female	357

COLOR.

White	775	Black	57
Copper	63		

NATIVITIES.

California	393	Holland	3
Other parts of U. S.	170	Bavaria	1
British American Provinces	8	Russia	1
Mexico	11	Poland	3
Central America	3	Sweden	2
Chile	4	Switzerland	3
Peru	1	Italy	3
England	22	Greece	1
Ireland	108	Norway	2
Scotland	10	Azores	2
Wales	2	West Indies	1
Isle of Man	1	China	60
France	25	Australia	1
Germany	31	Sandwich Islands	1
Prussia	6	Unknown	12
Austria	1		

RECAPITULATION.

Died in City Wards	716	Alms House	7
City and County Hospital	54	St. Vincent de Paul Asylum	1
U. S. Marine do	8	Foundling House	4
French do	15	Industrial School	1
German do	10	Casualties	21
Italian do	1	Suicides	11
Small-pox do	18	Total	895
St. Mary's do	16		
St. Joseph's Infirmary	12		

ORIGINAL COMMUNICATIONS.

SCARIFYING THE GUMS.

Read before the Sacramento Society for Medical Improvement, by F. W. Hatch, M. D.

The object of an association, such as that under which we are organized, is for mutual improvement —for the interchange of thought untrammelled by the forms and conventionalities which too often beset the intercourse of physicians at the bedside—for the discussion of subjects which possess an interest to us as practitioners, and which can in any degree, however small, reflect light upon the oftentimes uncertain paths we have to follow.

As such, our deliberations should be practical, and the more they partake of this element, the further they deviate from what is purely theoretical, and therefore uncertain and problematical, the higher the utility for those engaged in them. In theory, in medical philosophy, we have a field over which the imagination delights to wander; varied, broad, expansive, and beautiful as a garden with flowers. But with all its attractiveness, it too often lacks that which is most essential—a profitable bearing upon practical success.

It is under the influence of these views that I have selected a subject for this evening, which, from its very nature and simplicity, would seem to be altogether practical. As in the natural world, in the objects which surround us, we often find the most intricate mechanism, and the most beautiful displays of creative power in the simplest and most familiar forms, so, in our profession, we may gather much that is useful from a consideration of the trite and common-place matters of every-day observation.

Learning, for the first time, a few days since, that it would fall to my lot to occupy a portion of this evening, I promised Doctor Simmons to say *something*, even if it were only on "cutting the gums." Upon reflection, I determined to select the subject thus jokingly announced. And yet, even here, in this familiar, eminently practical theme, I find myself tempted, at the very outset, to wander off into the regions of theory. To what extent should cutting the gums in dentition be practiced? Does early scarification render the subsequent process of dentition more tedious and difficult? These and other questions relating to the subject have been discussed in our books, and the opinions of physicians vary even as the authorities upon whom they are wont to rely.

It is stated as a fact, and it is probably not far from the truth, that of the infants born, not less than one-third die before attaining the age of twenty-three months—that is, during the period of the first dentition. This is confessedly the critical period of infantile life; that when most of the diseases of infancy develop themselves, and it is not surprising that much weight should have been given to the influence of the process under consideration in the causation of a mortality so marked. It is natural, then, that in undertaking the professional charge of an infant at this age, the mind should be instinctively directed to the condition of dentition, the ease and regularity of its progress, the difficulties it encounters, the sympathetic disturbances set up, whether in the mouth itself, the abdomen, or in the nervous centers; and the means of its relief when at fault.

That much suffering has been averted by a timely application of the knife, will doubtless accord with the views of most physicians, but it is no less true that it has frequently been resorted to unnecessarily. Coincidence in time is often mistaken for a relation of cause and effect, and every diarrhea, every disturbance of the digestive function, every possible trouble of the nervous centers is ascribed to this one cause.

Leaving out of view the common indications for the interference of the surgeon, and the question whether an unnecessary division of the gum renders the subsequent protrusion of the tooth through the resulting cicatrix more difficult than before, I pass to a consideration of the principal object of this paper, the dangers of the operation; and what I shall have to say upon this point is based upon four cases coming under my immediate observation, or authentically related to me. *

The first of these cases occurred a good many years ago in Wisconsin, in the practice of a highly respectable physician, and was seen and attended by myself in consultation. The second was under the care of the late Dr. W. G. Proctor, and was also seen by myself in consultation. It was a little child on Eighth street. The third occurred about twelve years ago in my own practice in this city. It was seen and attended by Drs. Morse and Proctor in consultation. The fourth, also in this city, was not seen by myself, but related to me by the friends of the family in which it occurred, and I was glad of the opportunity thus presented of correcting the impression which had, perhaps naturally, fastened itself upon their minds, of malpractice on the part of the attending physician.

Inasmuch as there was a marked similarity in the symptoms and general progress of the three cases observed by myself, a history of one will suffice for

* Since the above was written, the history of a fifth case has been related to me, occurring in a neighboring city. Substantially, it agrees with the others which I have detailed.

all. I say there was a marked similarity in the cases. There was this difference, however; that the first seen was a weak, feeble, anemic child, evidently affected with tubercular disease, and possessing an element of chronicity about it not observed in the others.

I regret that I am unable to relate the third case with the minuteness of detail which its interest merits. It was, however, one of those cases so commonly met with among infants, diagnosed as simple meningitis.

The patient, a child above 12 months of age, lately weaned, was attacked with fever, restlessness, hot skin and disturbed sleep. This condition was stated to have continued during the day and night. Upon being called on the following morning, it was in about the same state, with frequent but weak pulse, skin hot and dry, stomach irritable, bowels inclined to constipation, drowsiness, with occasional attacks of nervous agitation and restlessness. Ordered a warm bath, and calomel to be given in divided doses every few hours until a free evacuation of the bowels should occur. In the evening the condition of the child had but little changed; the bowels had been well acted upon by the mercurial, but the stomach was still irritable. There was also sighing respiration, and the head was thrown back on the pillow in a manner peculiar to children affected with cerebral disease. Having at that time some faith in the efficacy of the mercurial treatment of cerebral and other inflammatory diseases of infancy—a practice even now advised by some of the very best authorities—I ordered the continuance of calomel in fractional doses, combined with a small quantity of ipecac. This, with some other adjuvant treatment directed more especially to the state of the stomach, was continued until the third day of my attendance, when attention having been called to the fact of the child constantly thrusting its fingers into the mouth, and observing the gums over some of the inferior teeth to be very considerably tense, I scarified freely on both sides, cutting down upon the teeth which were near, or not very far from the surface. I confess, there was something in the appearance of the child causing me to hesitate, and occasioning some misgivings about the performance of this little operation—a pallor, a waxen, delicate tint which even then recalled the unfortunate cases previously witnessed. There was, however, no unusual hemorrhage at the time. Treatment continued.

Visiting the patient before evening my worst fears were realized; the incised gum was still bleeding, the fluid oozing out from the cut surfaces. I was informed by the family that there had been a certain amount of bleeding during the day.

A small quantity of Monsel's salt was immediately applied, and retained upon the bleeding surface for some time by a compress held in position by the finger. It seemed for a time to afford hope of success, as for some hours more or less, there was no observable discharge.

With the remembrance of previous cases vividly before me, and their slow but certain fatality, my anxiety was naturally great, and the case was watched with unusual diligence.

The hemorrhage returning in the night, I requested Dr. Morse to visit the patient with me, and the following morning Dr. Proctor was also called. Astringents, such as alum, tannin, iron, nitrate silver, and ice, etc., were assiduously applied, and tinct. ferri chlor., and beef tea given in frequently repeated doses internally. Every possible effort, in short, was made to support the strength, improve the quality of the blood, and arrest the hemorrhage. All exertion was unavailing; the child sank exhausted by the loss of blood.

The difficulties attending the effort to arrest the hemorrhage in such cases are almost insuperable, arising from the impracticability of maintaining compression, and keeping up a constant application of the astringents, which are continually wiped off by the movements of the tongue and lips, or washed away by the fluids taken into the mouth. The nature of the disease, moreover, especially if of a cerebral nature, presents a serious and perplexing obstacle in the case. As in other diseases which we are called upon to treat, that which is most dangerous, and therefore most urgent, demands the most attention, and the primary affection, though of the nervous centers, is lost sight of in view of the greater and more immediate danger resulting from the loss of blood. The delicacy of the position is one which can readily be appreciated, even though we may be spared an actual experience of its difficulties.

There are two other circumstances to which I wish to call attention; the peculiar constitution of the children referred to; the waxen pallor of the face; the general delicacy of the organization—a feature characteristic of all the cases I had ever seen—and the mercurial treatment.

The one affords evidence of just that kind of constitution in which the hemorrhagic diathesis might be supposed to exist. In reference to the other, an interesting question arises, how far it was responsible for the production of that condition of the blood which favored the continuance of hemorrhage. In other words, did there exist what we have been accustomed to call a "hemorrhagic diathesis"? If so, was it original or acquired?

Now, I know of no circumstances, and, in two

of the cases referred to, particular inquiries were made into this point, which could lead to the belief in the existence of at least an hereditary influence predisposing to or establishing this diathesis; nor was there any appreciable splenic or lymphatic disorder, which, if we are to believe the doctrine of Virchow, is necessary for its production. Unfortunately, it is not easy to determine beforehand, in any given case, the existence of those peculiar modifications of the blood which constitute the diathesis in question. The previous family history, and most of all, the individual predisposition, can seldom be known. Nor would it often happen, that the physician, when about to perform so trifling an operation as that of scarification of the gums, would stop to estimate the probabilities of death by hemorrhage.

In cases in which this diathesis is strongly marked, we know that the sanguineous fluid is thin, ichorous, deficient in fibrin and in red globules, and lacks the power of firm coagulation. But these very modifications exist in all who have lost much blood, and the continuance of the hemorrhage itself constantly keeps up and increases the physical condition upon which it depends.

Again: Was the mercurial treatment, freely adopted in these cases, in any manner responsible for the result?

There are probably few of us who engaged in the pursuit of the profession, ten, fifteen or twenty years ago, who did not bear with them from the college halls an abiding faith in the remedial efficacy of mercury in inflammatory disease, in modifying the products of inflammation, in preventing effusion, and in hastening absorption, when it had taken place. It was the panacea of the old school of medicine, more potent even than venesection, capable, as has been somewhere remarked, of "grappling single handed with a disease in the blood, and coming off victorious in the struggle." It served to cover up a multitude of the sins of omission, to allay the conscience stung by a conviction of ignorance of pathology, soothing it by the reflection that if mercuralization could be forced in at one door, disease, whatever its nature, would hasten out at the other. I confess that this faith was once mine, received from the instructions of my preceptors, and the teachings of the books, rooted by the fancied result of experience, and only abandoned from the slow yet settled conviction of riper and more extended observation.

Of the four cases of death referred to in this paper, I have stated that I have had no personal knowledge of one. In the other three, I was more or less personally interested and know something of the treatment. In all of these the organic disease was supposed to be substantially the same, and the mercurial treatment was thoroughly and systematically pursued. In all of them it had been persisted in for some time previous to the scarification of the gums and the occurrence of hemorrhage, and I have repeatedly asked myself how far the mercurial influence affected the result? The books teach us that mercury does esentially modify the character of the circulating fluid, and upon this property indeed its remedial powers in certain diseases is admitted to depend.

Waring in his recent work on Practical Therapeutics, says of the action of mercury: "The blood is impoverished; the patients become thin and pale; and Dr. Farre considers that it destroys the red blood globules (hematine and globuline) as effectually as they may be destroyed by venesection. Mr. H. Smith," he says, "found that blood drawn from a person under the influence of mercury is generally cupped and buffed; that the clot is less solid and easily broken down, and that there is less cohesion of the principles which form the vital part of the blood. In some cases it will not show any disposition to coagulate."

Headland, also, in his valuable work on the "Action of Medicine," Art. *Mercury*, establishes the following as his second theorem:

"Mercury disintegrates or decomposes the blood and thus wastes the body. This," he says, "is the systematic action of mercury, on which too much stress cannot be laid. Dr. Wright has analysed the blood of patients under mercurial action. It is materially changed. It contains more water and is more prone to putrefaction than healthy blood. The fibrin, albumen, and red globules are diminished in amount, and a very fœtid matter is present in large quantities. * * * The mercurial action, then," he adds, "by some inscrutable chemical power, of whose nature we know nothing, is able to decompose the blood; by destructive agency it deprives it of one-third of its fibrine, one-seventh of its albumen, one-sixth or more of its globules, and at the same time loads it with a fœtid matter, the product of decomposition."

Stille, in his Therapeutics, speaks in terms equally clear. After describing the effects of mercury in medicinal doses, he says: "These symptoms appear to depend upon the radical change which the blood has undergone by losing a large proportion of its normal solid constituents, and, perhaps, a portion of that vitality on which its coagulabilty in part depends. The unwonted fluidity of the blood predisposes to hemorrhage, which may become dangerous."

Other authorities bearing on the same point might be adduced. The evidence given is sufficient, however, to establish the fact of the impoverishing action of this mineral upon the circulating fluid, in bringing about, in short, that very condition of system which we call the hemorrhagic diathesis, in which, as we have seen, the power of coagulation is impaired—the normal proportion of fibrine and red corpuscles is destroyed.

But, it may be asked, was there time, in the cases related, for the accomplishment of these effects upon the vital fluid? Now, we know that some individuals are peculiarly susceptible to the influence of mercury; that even in every one at all amenable thereto, the constitutional influence of that mineral may be excited in thirty-six or forty-eight hours, by small, yet frequently repeated doses, say one-twelfth of a grain every hour; and though infants, confessedly, possess a general immunity from ptyalism, this is nothing but a local effect, common indeed, but by no means essential to a complete constitutional influence. Whether, as has been supposed, the exemption of young children from local irritation be due to the imperfect development of the parotid glands, or to some other unknown cause, the remedial effects of the medicine are none the less obvious; and if its remedial effects, why not those also which are or may be deleterious, arising as they both must do through absorption—a modifying influence upon the circulating fluid? The one is but an exaggeration of the other. The fact of the rapid absorption of mercury has been apparently fully demonstrated by several experiments. In one instance recited by Taylor, it was discovered in the blood an hour after the medicine had been taken; and in another, referred to by the same author, in which five grains of calomel had been taken twelve hours before death, and again four grains four hours before the fatal event, it was distinctly found in the bile, and in the substance of the spleen.

In the method of operating in the cases referred to, there was nothing peculiar. In my own case, as is my invariable custom, the division of the gum was effected with the *nail blade* of my pocket knife, this being considered preferable to the ordinary gum lancet. It is always at hand, and, what is of more consequence, it is *duller*, and divides the gum more by its pressure than by direct incision, thereby lessening the liability to hemorrhage and retarding the healing process.

I conclude an already too lengthy paper, with a brief summary of the results arrived at in my reflections upon these cases.

1st. That while scarifying the gums in infancy is frequently of the most essential service in allaying nervous irritability, and relieving or warding off the early indications of cerebral congestion, the operation is not without danger, and like all others upon young children, should be performed only for just and sufficient cause.

2d. That it should be resorted to only on the most urgent indications, in systems already reduced by previous disease—pale, anæmic, and under the influence of mercury. That under these circumstances, it is better to risk the excitement due to difficult dentition than resort to a remedy which may result fatally; in other words to bear and counteract the ills we have to deal with, than encourage others we know not of.

3d. That in the cases referred to, the subject of this paper, there was an hemorrhagic diathesis, probably acquired as one of the effects of mercurial influence.

4th. That the condition of the system, especially of the blood, in similar cases, is such, that they must almost of necessity prove fatal.

In the brief and somewhat hurried comments which have been presented upon this interesting subject, I have endeavored to confine myself as strictly as possible to facts, to matters not resting upon theoretical conclusions, but upon the demonstrations of medical science, applying them, imperfectly indeed, to the elucidation and explanation of the subject under discussion. How far I have succeeded in accounting for the unfortunate results of the cases referred to, I know not; but so firmly and thoroughly convinced am I of the correctness of the conclusions arrived at, that no persuasion, no argument however urgent, could induce me to resort to the simple operation of cutting the gums in an infant possessing the constitutional features alluded to, and to whom mercury had for any considerable length of time been given.

ASTIGMATISM.

By Geo. H. Powers, M. D., Surgeon to Ophthalmic Department City Hospital, etc.

The occurrence of several cases of this anomaly of refraction which had been wrongly diagnosed before I saw them, leads me to say a word in reference to the subject. And first let me say that these cases furnish a good argument for the propriety of "Specialties in Medicine," a much mooted and often decried subject in the profession. It is not possible for a physician, who spends twelve or eighteen hours of every twenty-four in watching and caring for the sick, to give much attention or thought to the minutiæ of ophthalmology. He has enough to do without this, and it is not only proper, but even neces-

sary for the well-being of the patient, that some regularly qualified physicians should put themselves in the way of seeing so many cases of ophthalmic disorders as to be able to recognize shades of difference which must escape the less practiced observer.

Astigmatism is the name for an anomaly of refraction of the eye caused by an irregular curvature of the cornea, and is by no means an uncommon condition, although generally unnoticed except in exaggerated forms. The subject is very fully treated in German works on Ophthalmology, and especially by Donders, whose observations and calculations are almost miraculous in their minuteness.

Very many persons who claim excellent eyesight will find that with one or the other eye, or both, a series of parallel lines, thus, ═══ will look more black and distinct in one position than in another. For instance, while they appear plain enough in the horizontal position, they may become much more distinct if held so as to be perpendicular, or inclined at an angle. This is due to the fact that the radii of curvature of the cornea are not all equal, and this is the simplest test of astigmatism.

Again, if in a darkened room, a dark chimney be placed around the gas or lamp flame, and a small round hole made in the chimney, this aperture will appear *oval* instead of round to the astigmatic eye. In the last case I saw I recognized this anomaly unexpectedly while making examination of the fundus of an eye with the ophthalmoscope, the optic disc appearing oval instead of round.

This irregularity of curvation may exist in one or more directions, making endless complications, and it is often combined with myopia or hypermetropia.

The only relief for this trouble is in the use of cylindrical glasses, whose curvation corrects the irregularity of the cornea, and it is refreshing to see the great degree of satisfaction expressed by one who has struggled for years against the difficulty caused by an extreme form of astigmatism, when he first is enabled to see with normal eyes. In one case, a gentleman, whose occupation required the use of logarithms, and consequently excessive use of his eyes on small figures, the astigmatism was so great that he could not distinguish a 3 from a 5 without the use of a powerful magnifying lens, which he held in his hand as he worked; and when he found that there was a glass which could make these small figures plain to him as to another, his delight was boundless. In his case there was co-existent myopia, and the glasses he needed were 24 inch concave cylindriques.

In another case, a lady, whose family physician has assured her for two years that the pain in her brow and temple and through the eyeballs, was due to neuralgia, finds entire relief by the use of No. 42 convex cylindriques, the pain having been caused simply by over-use of abnormal eyes without the needed artificial correction.

DEATH FROM HEMORRHAGE.

Caused by the bursting of a vessel in the neck. By W. Scott Thorne, M. D., San Jose.

August 20th I was called to see a man, whom the messenger said "had his throat cut." On reaching the house, I found a middle aged man lying on the floor surrounded by a pool of blood. On the left side of the neck was an irregular wound, extending from the upper margin of the thyroid cartilage, two or more inches downwards, and from the median line an inch and a half transversely. The hemorrhage was excessive, and in order to control it until assistance could be obtained, I grasped the soft parts deeply above and below the wound along the course of the great vessels. Drs. Cary, Cory and Turner soon came to my aid, when we endeavored to ascertain the precise nature of the injury and secure the bleeding vessels. The hemorrhage from the region of the clavicle and deep tissues of the neck was so profuse, that we were unable to recognize anything satisfactory, although aided by compression and rapid sponging. Thinking, perhaps, the common carotid might be the seat of injury at a lower point, we enlarged the wound downward by an incision through the integument to the sternum, and by careful dissection exposed the common carotid as far as practicable. No injury to this vessel was found. The blood issued from beneath the clavicle and sternum, and I now introduced my fingers into the wound and endeavored to compress the subclavian artery against the clavicle, but to no avail. The terrors of our patient's situation were relieved by prolonged syncope from which he never rallied.

Examination after death, revealed the cause of hemorrhage to have been a complete severance of the external and internal jugular veins, the superior thyroid artery as well as the inferior thyroid and vertebral, about half an inch from their origin. The left pleura had been penetrated, and its cavity was full of blood. A rent was also found in the subclavian vein. The common carotid artery had escaped injury. Notwithstanding the appalling hemorrhage that must have ensued upon the reception of this injury, the subject walked, unaided, more than an eighth of a mile. The lesion was necessarily fatal, and the case is one of little surgical importance, and I am only induced to report it in order to show the terrible nature of accidents incidental to the process of filling glass bottles with carbonic acid

water, and with the hope that some additional security may be suggested for the better protection of those engaged in the business. The large French glass soda bottles, five-sixteenths of an inch thick, are at present filled with a patent French apparatus with a pressure of 125 pounds. The bottle is surmounted by a metallic cap that closes with a spring when full. The workmen have heretofore been accustomed to protect the face only, with a delicate wire screen, leaving the entire body exposed to those terrible missiles, that are liable at any moment to be hurled with deadly violence against their persons. Mr. Verdier, the proprietor of the soda establishment in this city, proposes to furnish his workmen in future, with metallic casquets of sufficient strength to protect the head and trunk, and as an additional security, an iron case to contain the bottle while being filled.

PROLAPSUS OF THE CERVIX UTERI WITH EVERSION OF THE VAGINA IN THE LAST WEEK OF PREGNANCY. RUPTURE OF THE POSTERIOR PORTION OF THE BODY OF THE UTERUS DURING LABOR. RECOVERY OF THE PATIENT.

By John M. Willey, M. D., San Francisco.

The following case presents some features so peculiar that they seem to be well worthy of publication.

On the 5th of July last, I went at the request of Dr. W. Elliott to see a Mrs. R., living at the Potrero, whose case Dr. E., had mentioned to me several days previously as being a prolapsus of the uterus of a very unusual kind. I found a prolapsus of the cervix uteri with eversion of the vagina, so as to allow the protrusion of the parts nearly five inches.

The surface of the prolapsus was so darkly congested, as to approach a gangrenous appearance. At the extremity, which was somewhat pointed, was the os uteri, which readily admitted a catheter and through which the presentation, that of the head, could be satisfactorily made out. The whole appearance of this singular condition of things, both in form and proportion, bore a strange resemblance to the male penis in a state of hypertrophy or inflammation. The patient's age, as far as she knew, was well up to forty years, and this was her first pregnancy. As she complained of neither pain or inconvenience, and all attempts to remedy the prolapsus by returning any portion within the pelvis were entirely in vain, the only treatment adopted was to cover the parts with a cloth smeared with lard.

On the following day, in consultation with Dr. W. Carman, as the gangrenous appearance of the prolapsus was still more pronounced, it was concluded to poultice with yeast and flax-seed. This treatment on my visit the day after seemed to have benefitted the parts, at least the epithelium was detaching itself in greenish sloughs, leaving a healthy looking though highly vascular mucous membrane beneath.

On the morning of the 9th of July, word was sent that the patient was complaining of pain, and on visiting her I found the liquor amnii flowing freely through the os uteri and that she had occasional but not severe pain in her loins. There was no retraction or diminution of the prolapsed parts and no sign of any dilation of the os.

I regretted that other engagements prevented my remaining with the patient, but this state of things continued till about 7 o'clock in the eveniug, when, according to the nurse's statement she was taken with strong expulsive pains, and that suddenly she became aware that the child's head was forcing its way *behind* the prolapsed parts which were tilted upwards as it passed.

The labor was accomplished speedily, the placenta following the birth of the child in a few minutes. There was no hemorrhage or any unusual symptom to mark this singular birth, and when Dr. Carman arrived an hour afterwards he found the prolapsed cervix and everted vagina differing very little from what they were before delivery.

Behind the prolapsus, however, he found a rent from two and a half to three inches long, into which he could readily introduce his fingers, and which, communicating with the cavity of the uterus was evidently the fissure through which the child had passed.

This fissure corresponded with the long axis of the uterus and was about in the median line. Dr. Carman carefully returned the prolapsed parts within the vulva, which he had little trouble to effect, and applied bandages, so that when I arrived which I did shortly after he had left, I had no opportunity of making any examination. The future history of this case may be summed up in a few words. The woman made a perfect recovery, in no longer time than is usual after the most natural labor. She was in fact wholly unconscious of anything out of the way in her case and looked on the matter of the doctors' being so anxious about her state rather in the light of a good joke.

It is to be regretted that no one better calculated to describe the termination of this labor than the nurse was present, but abundant proof of the facts of the case both before and after delivery, exist in the repeated examinations made during eight days by Drs. Elliott and Carman, as also during part of the time by myself.

CORRESPONDENCE.

Philadelphia, Sept. 7th, 1869.

Messrs. Editors :—

If any of your readers visit our city, I hope they will not fail to spend a short time at the College of Physicians. It is now one of our recognized centres of medical interest.

It was founded in 1789, and by its age and the care exercised in the election of its Fellows, membership is both much sought after, and is *prima facie* evidence of good professional standing. Its Fellows must be twenty-four years of age, at least three years in practice, and vouched for personally by three members. Besides these, non-residents of Philadelphia may be elected associates, not exceeding fifty in number, twenty of whom may be foreigners. The initiation fee is fifteen dollars, and the annual dues ten dollars. Its meetings are held at present on the first Wednesday of each month; but a movement is now on foot to have also a monthly scientific meeting, chiefly clinical.

In 1863 the present fine fire-proof building was completed, as per agreement with the late Dr Mütter (Prof. Surg. Jeff. Med. Coll.), when his library and museum, with a gift of $30,000, for the maintenance of the latter and the Mütter Lectureship, were placed in the hands of the college. The building and grounds cost about forty thousand dollars, but by the increase in the value of land and materials, it is now worth certainly one hundred thousand dollars. Besides rooms for the library and museum, there is a fine Lecture Room, and moreover, the rooms are, with a wise liberality, placed at the disposal of the various Medical Societies (the County Medical Society, Pathological Society, Obstetrical Society, the Book Clubs, etc.), at a rate just sufficient to pay for the necessary gas and fuel.

The library is now one of the largest in the country, and has been accumulated both by purchase and bequest, and, more wisely still, by very large and continuous donations from living members. The College spends five hundred dollars a year on its library, and besides binding, etc., added last year three hundred and fifty books and periodicals. Dr. Samuel Lewis, in 1864, established the "Lewis Library," the whole of which (about three thousand five hundred volumes) he has purchased and presented to the College. Last year he added over two hundred volumes. They consist very largely of works belonging to medical biography, and history, and general medical literature, with which he is so conversant. The whole College Library numbers over fourteen thousand volumes, and fortunately it duplicates very few of either the books or journals to be found in the library of the Pennsylvania Hospital; the two thus forming a splendid collection, certainly unequalled in this country. Among the more valuable and rarer works, I may mention a complete set of photographs in four large volumes recently presented by the Surgeon General, Günther's Lehrbuch der bluthigen operat, Avicenna, Vesalius, Hippocrates, Fabricius, Cheselden, Conoper's Anatomy, Swan's splendidly illustrated book on the heroes, Lebert's Pathol. Anat. in four magnificent volumes, Hunter's on the Gravid Uterus, Boujalsky's Lithotomy, Camper's Anatomy, Duverney's Anatomy of the Head, etc.

The Museum, under the noble bequest of Dr. Mütter is growing rapidly. It contains now about one thousand three hundred specimens from the human body, besides one hundred and sixty-one models in wax, etc., nearly two hundred specimens from the inferior animals, principally from the horse, and forty-eight concretions from the same source. From M. Sappey, now Prof. Anat. in the Paris Ecole de Medicine, we have fourteen specimens of mercurial injections of the lymphatics similar to those with which he has enriched the Musée Orfila. There are also eighty-nine models of venereal cutaneous diseases, made by M. Ledion, formerly of the Hospital St. Louis, in Paris, but now a resident of New York. Among the human specimens the museum is especial rich in fractures and alterations of the head and neck of the femur (Nos. 111, 133 and 240, 250), and also in examples of ovarian tumors, Dr. Wash. L. Atlee having given to the College recently his large and valuable collection. One of them, dried, shows one cyst filling, another very like the chinese ivory balls inside one another.

The Mütter Lectureship is filled every third year, and the lecturer (who is allowed six hundred dollars for his expenses), must deliver three annual courses of at least ten lectures each on some subject in Surgical Pathology. Dr. Packard's valuable lectures on Inflammation and on Fractures we owe to this foundation. Dr. Harrison Allen after partly fulfilling his appointment in a course of lectures on Diseases of the Bones, was compelled to retire by the condition of his eyesight, and Dr. Jno. H. Brinton has been elected to the next lectureship. Doubtless he will make available to the public the very large experience he obtained in the army and while in charge of the Surgical Dept. of the Army Medical Museum.

At the Pennsylvania Hospital Dr. Addinell Hewson has been lately giving a fair trial to the "Earth Treatment." The idea he derived from the effects of the earth as a disinfectant in the earth closets.

From a pretty large experience, extending over several months, he judges very favorably of its merits, though his colleagues are not all so sanguine as to the results. He takes yellow clay which is well dried, but not baked, pulverizes and sifts it, and then applies it directly to the surfaces of the stump, wound, etc., retaining it in place by bandages, unglazed paper, dressing the fracture, box, etc. He claims that it is not only a disinfectant, but also diminishes very largely the amount of suppuration and the consequent drain on the system. Certainly the results in several cases of compound fractures, amputations, etc., which I lately saw, led me to judge very favorably of it. As a disinfectant in the earth closet, the dry earth is going, I hope, to solve the momentous question of the disposition and utilization of such sewage. In India, Prof. Charles, (Prof. Obstet. Med. Coll. Calcutta) informed me in 1865, that it was in very extensive use and with perfect success. Lately at the Wimbledon meeting of the English Volunteers, its use did away with the unsightly and filthy camp latrines and was a source even of revenue to the organization. In the wards of the Pennsylvania Hospital, and in the splendid new Hospital at Providence R. I., I have seen them in daily use without the slightest odor; and in Chicago, the courageous and indefatigable Board of Health, to whom that city owes far more than they are aware of, hope that in this remedy they may find the solution of the, to them, vital question of the purity of their river, and yet proper sewage. Apart from the question in a sanitary point of view, if it enable us to utilize such valuable manure, it will be, in an economical point of view, of immense benefit to the community.

Yours truly, K.

San Francisco, Sept. 24th, 1869.

Editors Gazette:

The patient with dislocated lens, whose case was reported by Dr. Smith in your last issue, having removed to this city and come under my observation, I take the liberty of reporting his present condition.

With the oblique illumination there is to be seen a bluish white opaque membrane nearly surrounding the field of the pupil, but widest at the upper inner, and lower outer border. There is also a thin filament stretching across the horizontal diameter of the pupil.

By attachments to these shreds of capsular membrane, the pupil is held fast throughout the greater part of its periphery, and is only very slightly dilatable by atropia.

Capt. B. can now read the No. 19 of Jæger's test-types by aid of a 2½ inch double convex lens.

In reference to your note on Dr. Smith's report of the case, extraction undoubtedly could not have been done in this case, the tumefaction of the lids having continued until absorption of the lens was already far enough advanced to make it evident that surgical interference was unnecessary.

Yours, etc., Geo. H. Powers, M. D.

CALIFORNIA ACADEMY OF SCIENCES.

The California Academy of Sciences held its regular semi-monthly meeting at the rooms on Clay street, on Monday evening the 6th ult. with a fair attendance of members. Mr. W. H. Haskell was proposed for membership. Dr. A. W. Saxe presented some specimens of the redwood log, heretofore mentioned in these columns as having been found 200 feet below the surface, by parties boring an artesian well in Santa Clara County. A diagram was also presented, showing the different strata of mud, sand, etc., passed through in boring the same well to the depth of 328 feet. A very interesting discussion followed with regard to these deposits, and the manner in which the fiber of the wood presented had been so perfectly preserved—wood found at such depths being usually carbonized.

Several specimens were received for the cabinet and museum, among which was the fossilized jaw-bone of a shark twenty-one feet long. Dr. Cooper gave notice that he had a paper which he should soon present for publication, on the annuals of California.

r. Blake called attention to the singular phenomenon which was generally observed throughout the State, a few weeks ago, of a peculiar light in the heavens soon after sunset. The Doctor said he could explain it only by supposing it to have been caused through the agency of a vapor or smoky medium, which, at a high altitude would reflect the sun's rays in such a manner as to present just such a phenomenon as was then noticed.

A request was expressed that each individual member of the Academy would gather all the information he could conveniently obtain, concerning the various weeds and plants that have been imported into California and become naturalized here. The object of collecting this information is the preparation of an article on the subject, which shall by the combined aid of the various members, be as complete as possible.

VACANT CHAIRS IN THE UNIVERSITY OF EDINBURGH.

According to the *Edinburgh Med. Journal* for August, the chairs of General Pathology and Clinical Surgery, are made vacant by the resignations of Professors Henderson and Syme. The appointment to the chair of Pathology, is in the hands of the Curators, while the nomination to the chair of Clinical surgery rests with the Crown. The candidates already announced for the former are Drs. Sanders, Grainger, Stewart and Andrew Smart; for the latter are Professor Spence, Drs. Gillispie, P. H. Watson, and Joseph Bell, of Edinburgh, and Professor Lister, of Glasgow.

California Medical Gazette.

SAN FRANCISCO, OCTOBER, 1869.

☞ *All Letters and Communications to be addressed to the* "EDITORS CALIFORNIA MEDICAL GAZETTE, *care of A. Roman & Co., San Francisco.*"

MEDICAL TOPOGRAPHY IN CALIFORNIA.

There is no subject that bears upon a knowledge of our State, that carries with it a greater interest to intelligent men at home and abroad, than the facts involved in its medical topography.

The varied and to many, apparently conflicting meteorological phenomena of this coast, have been a puzzle to the wisest, and still are to the most of people. Why we should have such an uniformity in the variety of conditions that go to make up the idea of climate, may be well understood by some minds, yet there is much to learn in their relations to hygiene. There have not been observers at a sufficient number of points to determine the geographical limits of these various phenomena. We are tired of generalizations without the accurate data, upon which all such generalizations should be based. The geology, botany and zoology of the region around the bay of San Francisco, have been comparatively well worked up, but their relations to medical topography are entirely unknown, and, with the exception of the contributions of Col. Williamson, of the U. S. Engineers, Dr. H. Gibbons, of this city, and Dr. Logan, of Sacramento, nothing has been done in meteorology.

We believe that there are places along our coast that possess conditions of climate, that, in a hygienic point of view, cannot be excelled in the world; but why must we dogmatize on the subject when the facts can and ought to be furnished that would prove these claims well founded.

The questions involved in the medical topography of any district, have a range almost unlimited; they embrace the whole range of the physical sciences, and investigate the condition of its population statistically, morally and socially, in short, every fact that can in any way exert any influence on public health. Medical topography should be as complete as a military map of the field of a contemplated campaign. It is not alone necessary to trace the causes of the past and present sanitary state of the locality, but to be able to predicate the future possibilities. A complete treatise cannot, therefore, be expected, until the lapse of some time; but it is from labor in this field that we must look for progress in the medical sciences, rather than materia medica. The tendency of the age is to rely less and less upon the therapeutical power of drugs, and study more the natural history of diseases and so learn to remove their causes.

The anomalous conditions of the climate of our coast give a peculiar interest to this subject; here the surprises are so frequent, and the transitions so extreme and sudden, that the attention is continually called to it. The influence of these transitions on every form of organic life is most marked; every little district has its distinct flora, and a botanist will be able to recognize from a bouquet of wild flowers in the hands of a returning excursionist, the region he has visited.

The strip of sand lying between San Francisco and the sea, is not more unlike the hard soil on either side of it than are its flora and fauna, and is it reasonable to suppose, that causes that have produced such results will have no influence in modifying zymotic diseases. Asthma, rheumatism, and ague, are found in some localities and unknown in others distant only a few miles and in sight of each other. The mortality record of San Francisco gives frequent cause of death to typhoid fever, yet some of the most intelligent practitioners of long residence in California, familiar with the character of typhoid fever as it is known at the East, have asserted that they practiced here many years before they met with a single case. We have met with the disease in a fatal form, but never with all its characteristics. During two years charge of the Penitentiary at San Quentin, we never met with a case of zymotic fever in any form originating there, although the number of men congregated in the prison, averaged not far from seven hundred.

It is our misfortune that there has been no concerted plan of observation to determine the laws of our climate, and the combination of conditions that determine its peculiar modifications. It is not that there are not capable observers, but for the want of coöperation and the habit of writing down the results of their observations, the facts are lost to the public, and perish.

The rust that blasts the crops over whole townships, as occurred this year, has its causes in the meteorological conditions, and is it not reasonable to suppose that these causes may be found to have an influence on animal life. It is for the medical philosopher to observe closely the facts through a series of years, according to a prearranged system in concert with others at various points. As there is so much unknown respecting the etiology of diseases, no man can say what facts are unimportant to preserve, therefore nothing should be allowed to

escape notice if we would collect material for a complete knowledge of the subject.

The *Provincial Medical and Surgical Association* of England, published in their *Transactions* many excellent models, which if imitated in the various counties of California, would do much to make us acquainted with the peculiarities of each locality and the laws that govern them.

To this end a society organized on the plan of the *Epidemiological Society*, of London, would be very desirable. It would serve to centralize and organize effort and direct the line of observation, to preserve and collect results, whether little or great, and make them contribute to the desired end; data could be accumulated that in course of time would enable those who come after us to draw legitimate conclusions and not leave them at the mercy of that fabulous personage, the oldest inhabitant.

WHAT ARE THE MERITS OF OUR CHINESE PHYSICIANS?

The question is intended to imply, what are the merits of the Chinese practice of medicine as compared with our own? Our answer is, that the Chinese practice of medicine is to ours, what the practice before the days of Harvey is to the present.

The superiority of the modern practice, over the crude empiricism of the past, is almost entirely due to our knowledge of anatomy, physiology, comparative anatomy, pathology and chemistry, and of these sciences the Chinese physicians are profoundly ignorant. Our information in regard to the profound ignorance of the Chinese in these sciences, is gathered from the Rev. A. W. Loomis' article in the *Overland Monthly*, entitled "*Medical Art in the Chinese Quarter.*"—From the writing of Dr. J. G. Kerr, who has charge of the "Medical Missionary Society's Hospital," in Canton.—From an article in the *American Journal of Medical Sciences*, entitled "*Remarks on the Actual State of Medical Science in Japan*, by Alex. M. Vedder, M. D., late surgeon U. S. Navy, Physician to His Highness the Prince of Nagato and Suwo.—From the Reports of the "Medical Missionary Society in China."—From a letter received not long since from Dr. A. O. Treat, Pekin, China.—From conversation a few days since with our friend Dr. Salter, American Consul, at Hankow and Kinkiang for the past seven years, and other sources.

Dr. Vedder tells us, that "The Japanese system of medicine is essentially based upon the Chinese, and nearly all medical books are written in the square Chinese character, which is read by all professional men." So that what Dr. Vedder tells us of the practice of medicine among the Japanese, is equally true of the Chinese. He says: "As to the professional acquirements of the Japanese faculty, dissection not being at all practiced in Japan, and even correct plates of the human structure being seldom seen, their knowledge of anatomy is exceedingly imperfect; still, they have native names for the viscera, the arteries, veins, nerves, lymphatics, and principal anatomical structures, though topographical anatomy is entirely unknown; in physiology they are entirely in the dark, knowing, for example, nothing of the sympathetic system of nerves, of histology or animal chemistry, and attributing to the *liver* very important moral qualities. The circulation also, is but imperfectly understood, the physician feeling the pulse at both wrists, from an impression that each side of the body is supplied by a corresponding side of the heart, independent of the other."

"Very many affections are supposed to proceed from the presence of various living organisms and worms infesting the economy, and going under the general name of 'mushi.' I have seen drawings purporting to represent these terrible creatures, and certainly, were any such existing, should deem them fully capable of producing all the mischief ascribed to them."

"Most of the medicines employed are of Chinese origin, and are exhibited in bulky powders, or decoctions of certain vegetables, and of most forbidding appearance and taste. Hygiene, the sister of proplylaxis, is indeed a sealed book to the Japanese, As regards obstetrics, the practice is, to a great extent, in the hands of midwives. The use of the forceps is unknown."

"Of operative surgery, the Japanese are most profoundly ignorant; they possess but few instruments, and those of very rude construction, but had they the whole modern 'armamentarium,' the want of anatomical knowledge would prevent them from being of much use. In case of fracture, no apparatus whatever for retention is employed, nor any attempt made at reduction; leeches and plasters alone being used to reduce the tumefaction and mitigate pain; a crutch made at my suggestion for one of the Prince's officers, has been regarded as a miracle of skill and ingenuity. The medical men attached to the Japanese Embassy to the United States, practised most freely upon the credulity of members of the profession there, in their accounts of hospitals at Yeddo, and of surgical operations performed in Japan. I need scarcely say that all these accounts were gratuitous falsehoods, and that there is not such a thing as a native hospital existing in Japan."

Dr. J. G. Kerr in speaking of Chinese Physicians says that: "They have, however, no knowledge of

the structure of the human system, or of the functions of the various parts. They are also ignorant of the nature of disease, and to a considerable extent, of the properties of remedies. They have theories on all these subjects, which are very elaborate and complicated, but which are absolutely false in every particular."

"The department of surgery can scarcely be said to exist. Beyond the applications of caustics and plasters to tumors and ulcers, and of poultices to broken bones, they are entirely helpless. There is no man in all the empire who can give aid, in any case of accident or disease which requires manual or instrumental interference. They are, of course, entirely without surgical instruments, and all the apparatus which modern ingenuity has applied to the relief of injuries, deformities, and diseases."

Says the Rev. Mr. Loomis, "Very few of the Doctors, whether learned or ignorant, who are not more or less under the influence of superstition, believing in the power of supernatural influences and evil spirits to produce diseases, or in the necessity of aid from the good spirits to combat the agency of the inimical spirits."

"So prevalent is this belief among the common people, that the gods are often consulted for information as to which physician shall be employed; also, many apply directly to the gods for medical advice—to the Chinese Æsculapius, or some other god—or to a clairvoyant physician." For a full list of their disgusting remedies, and for a fuller account of their ignorant, superstitious, deceptive and revolting practices, are they not written in No. 6, Vol. 2, of the *Overland Monthly*.

That the Chinese practice of medicine is a compound of ignorance, superstition, and a kind of spiritualism, is a patent fact to the scientific world. For instance, they prescribe among other scientific and efficient remedies, hair,—dandruff,—animal exuviæ,—paring of finger and toe nails of pregnant women,—the placenta,—dragon's bones,—hoof of a white horse,—bull's manure,—ram's horns,—ears,—and many other things of like delicate nature.

REV. F. F. ELLINWOOD, D. D.

The tendency of the popular mind to run after the miraculous in medicine, is peculiar to no age.

"In physic as in fashion we find
The newest has always the run of mankind."

The more absurd the method, so long as it is new, the better. A mountebank professes to cure all ailments by the laying on of hands, and the people show their love of the marvelous, by flocking to him in great numbers, and the miracles of our Savior are put in the shade by the works of this new apostle. An impostor from the Celestial kingdom is the latest novelty in the healing persuasion; without respectability even among his own countrymen, "plenty good for Americans but no good for Chinamen," as an intelligent Chinese merchant remarked of this impostor, whom this brother impostor of a D. D., calls "one of the most skillful and most popular physicians of San Francisco."

There is no doubt that this Chinaman's theology is equal to his medical knowledge; let us all go and worship at the Josh house. We hope Doctor Ellinwood will go and sit at the feet of their gods and learn something. There is no doubt but that he can learn more politeness and more christianity than he exhibits in this gratuitous insult to a learned profession.

When the Reverend gentleman is attacked again with gout or indigestion, which we hope will be soon, our best wish for him is, that he will find no better medical attendance than that this Chinese juggler can afford, and that he will give him no more palatable potion than the scrapings of his own toe nails, or a portion of his own ears. But he is the last man to apply for such skill; he will call on the best medical man he can find, probably in the middle of the night, and claim exemption from remunerating him, on the ground of his sacred calling.

This miserable fellow diagnoses all diseases as of one nature—promises cures to all—but wants his fees in advance. Persons in the last stages of consumption, when but few days are left to them on earth, are told that they have nothing but "bad liver and much kidney," and commit themselves to celestial aid to pass the Celestial Gate.

An educated physician is expected to cure everybody; he gets no credit for his cures, but his unsuccessful cases are scored up against him; but the Indian doctor, the spiritualist, and the Chinese barbarian, are not expected to cure, and their failings are passed in silence, but if some lucky one gets well in spite of them, it is trumpeted through the town as an astonishing cure. We set out to speak of Rev. F. F. Ellinwood, Doctor of Divinity, who used the sentence above quoted, in an article on the Chinese, in the *Occident*, of September 18th, but we set upon the other fellow; however, it maks no difference, they are a pretty pair. *Par ignobile fratrum.*

THE ITALIAN HOSPITAL.

Any one desirous of knowing how far the American population are behind foreigners in provision for the sick, should visit the Italian Hospital just opened. The Italian Mutual Benevolent Association consists of about nineteen hundred mem-

bers, including many gardeners and fishermen, and without aid from any other people they have erected and furnished a model house for their sick, and in the formal opening they invited the "needy of all nations" to share its advantages. We think they committed an error in building of brick, when there is no one indication that would not be better fulfilled by a wooden structure. Again it is an outrage, in keeping with our own shameful neglect of our duty to provide for our own sick, that our authorities compel these benevolent societies to erect their hospitals so far from town, that in many cases the removal of the sick to them must endanger their lives. In fact our people have so poor a conception of what a properly conducted hospital should be, that they consider them nuisances that cannot be too far removed from the place where they are most needed. Such an institution as the Italian Hospital would be an ornament to any place. The sick, though they may not be the recipients of any favor from the public, have not forfeited by their misfortunes, their rights as citizens and strangers, and the authorities have no more right to exclude a hotel for their accommodation from the town than one built for the use of the well, so long as the public health is not endangered. This can never be the case where contagious diseases are not admitted, and where the institution is properly conducted. The welfare of the sick should be the chief consideration in the selection of a site for a hospital. But the ideas of the public concerning hospitals, are derived from our own county and marine hospitals.

The Italian Hospital is small, affording accommodations to about fifty patients only, until the contemplated new wing is completed. The greatest number of beds in one ward is ten, many have but one, and abundant facilities for bathing, and all hygienic measures are provided, and the whole aspect of the place is cheerful and inviting. When a patient is admitted he is provided with a hospital suit of clothing, his own being laid away until he leaves the institution. Dr. Andrei, the resident physician, is a young man sent out from Florence, by request of the Society, and we doubt not will prove a valuable acquisition to the fraternity on this coast. Indeed the whole affair is a credit to the enlightened liberality of the Italians.

DEATH FROM CHLOROFORM, FOLLOWING EXTRACTION OF TEETH.

We find the following case in the *N. Y. Medical Journal* for September 1869.

"Mrs. Emily Banker, wife of John S. Banker, of Hart's Falls, died while under the influence of chloroform, administered by Dr. Z. Cotton of that place, for the purpose of extracting her teeth. Chloroform was administered and three teeth extracted. Patient came out all right. Took the second inhalation, and nearly all the remaining teeth extracted. Patient rallied and showed no signs of distress. At her own request the chloroform was given the third time, and the remaining two teeth extracted. This time, however, respiration seemed suspended; her head was thrown forwards to allow the blood to escape from her mouth, artificial respiration resorted to, but it was of no avail."

The Coroner's jury in the case rendered a verdict that "Mrs. Banker died from the use of chloroform for the purpose of extracting teeth, and that it was judiciously and properly administered, and that no blame can attach to Dr. Cotton. It might be stated in addition, that her family physician had advised her that it would be safe, as far as he knew, for her to take chloroform."

DEATH FROM SHOCK FOLLOWING EXTRACTION OF TEETH.

The *Medical Times and Gazette*, says that: "At Whitefield, William Hilton, aged 14 years, went to Dr. Birnie to have two teeth extracted, and immediately after the operation had been performed, he fell back in a fit of epilepsy, from the shock to the system, and died."

The friends of Dr. R. K. Nuttall will be glad to learn of his continued improvement in health. Letters dated Aug. 29th have been received. There is no foundation for the rumor of his intended return. The fascinations of the practice of medicine in California, are not sufficient to draw him from his retirement at Dresden.

The medical classes of the Willamette University, Oregon, will open November 4th, to continue four months. D. Payton, M. D., is President of the Department of Medicine, and H. Carpenter, M. D., Dean of the Medical Faculty.

☞ *Readers of the* California Medical Gazette *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received and acknowledged under "Communications received."*

Dr. Iram reports in the *"Annales de Electricite"* another case of poisoning with opium, of which, in the shape of pills, 0.5 grammes were taken by a lady who recovered on application of the electric battery, the two poles having been placed respectively on the neck and perineum, after the useless employment, for several hours, of tartar emetic, coffee and tannin.

SURGERY.

THE TREATMENT OF MALIGNANT TUMORS BY ELECTROLYSIS.

By W. Neftel, M. D., New York

Although I am preparing for publication my researches on the continuous galvanic current, where remarkable illustrations of the electrolytic treatment will be given in extenso, I consider it my duty to give at once a preliminary account of the following case, which may contribute to save the lives of many sufferers deemed incurable.

Hon. Th. T. D——, a highly accomplished gentleman, 58 years old, consulted last year several celebrated surgeons in London and Paris (amongst others, Nélaton) with regard to a tumor in the left mammary region. They all advised him not to undergo any surgical operation, as they considered the tumor a malignant one, the removal of which would only hasten the fatal termination of the undoubtedly constitutional disease. The patient, nevertheless, insisted upon the extirpation of the tumor, and our great surgeon, Dr. Marion Sims, quite successfully performed the operation in Paris. Soon after cicatrization of the wound, however, the axillary glands of the same (left) side began to enlarge, and in January last presented a tumor of the size of an egg, consisting of a conglomeration of enlarged and indurated glands. Dr. Sims again extirpated this second tumor, the microscopical appearance of which was that of a real cancer (carcinoma of the axillary glands). The specimen was presented to the New York Pathological Society and examined by distinguished histologists. The wound this time healed very slowly, as it was accompanied by dangerous complications, and extensive erysipelas, high fever (107.8° Fahr.), rigors and delirum. Scarcely had the wound healed, when a new scirrhous tumor began to grow in the right mammary region, and very soon attained the size of an orange, or more. It now became evident that another surgical operation would be useless, for it could only call forth, as before, an immediate relapse, and perhaps in a more dangerous locality. As nothing remained to save the patient, who was perfectly aware of his condition, and whose constitution was broken down, I proposed the electrolytic treatment, expecting, as the best result, merely the local destruction and absorption of the tumor; for, in the present state of our knowlege, I could not have entertained any hope of producing by electrolysis the least favorable change in the constitutional disease.

On the 24th of April, and the 4th and 7th of May, in the presence of Drs. Metcalf, Nott, and B. Howard, I performed the electrolysis by means of the large apparatus of Krüger and Hirchman, with elements of Siemens, subdividing, at the second and third operation the cathode into three and four branches, connected with the needles by serres-fines. The latest improvements of the apparatus afforded the possibility of gradually increasing the quantity of the current without interrupting the circuit, and of diminishing it in the same way, so that the circuit was broken only by the extraction of the last needle. Not a drop of blood escaped. The first operation lasted two minutes, using ten elements; the second five minutes, with twenty elements, and the third ten minutes, with thirty elements. After the operation the tumor increased considerably in size, but became softer and more elastic. No febrile or other local or constitutional symptoms followed. On the contrary, the patient who before was weak, anæmic, and cachectic, began to gain strength and flesh; the tumor at the same time diminishing slowly but constantly. A month after the first sitting the tumor was found a great deal softer and smaller; at the end of the second month it had almost disappeared, and a fortnight later no traces of it remained. The general condition of the patient is now in all respects excellent, and new deposits can nowhere be detected. In his last letter he writes to me as follows: "I am not able to discover any new deposits anywhere, nor would the tumor in the right breast be detected by any ordinary observer. I hope the old devil who took lodgings there and was ejected, took all his baggage with him."

The above related case presents the following points of interest:

1. The patient has been examined by a number of celebrated physicians in Europe and America, who have all considered him affected by a constitutional cancerous disease; and the extirpated tumors, being real cancers, have proved the correctness of the diagnosis.

2. The described case brings me to the conclusion that the electrolysis must be considered not only as a local agent, as thinks Althaus, but as one capable of modifying, and even curing the constitutional diathesis. I explain it in the following way: It has already been established, by experimental researches, that the electric current affects powerfully all protoplasmatic structures. Hence it is possible and probable that the cells (which have to be considered as bearers of the contagion and the cause of the generalization of the disease) get their protoplasma altered in such a way by electrolysis, as to lose its specific infectious properties, and make it incompatible with the existence and propagation of the cancerous new formation.

3. Finally, this is the first authentic case of cure of a real cancer in a subject affected with constitutional diathesis. I think that if Althaus, to whom we are indebted for the improved electrolytic method, did not succeed in curing a single case of malignant tumor, it is owing only to the imperfection of the apparatus on which he works. I have had one like it imported from London, and have ascertained, by the feeble reflexion of the needle of my galvanometer, and by the weak muscular action it produces, that Althaus' apparatus generates a very small current-quantity. This explains also why he is obliged to have recourse to so numerous and prolonged sittings (half an hour), whilst, with the excellent apparatus I am in the habit of using, incomparably better results can be obtained in a much shorter period.

With regard to non-malignant tumors, I will give in my next paper an account of what I have attained by electrolytic treatment. Especially the soft tumors, nævi, etc., yield very rapidly to it. A large goître of eighteen years' standing has completely disappeared in the course of two months. So far as I can judge from my experiments on animals (rabbits), the electrolytic treatment of varicose veins and aneurisms promises to be highly successful. Examining microscopically the thrombi, I could repeatedly convince myself, in opposition to the assertions of Tschausoff, that the organization of a thrombus really does take place, a fact which had been already experimentally demonstrated by the classical researches of Virchow as far back as 1846. Again, it is not difficult to follow up the gradual transformation of the colorless blood-corpuscles into connective tissue-corspuscles, which was likewise accepted by Virchow.

But the most surprising effect can be produced, by the electrolytic treatment, on organic strictures of the urethra.

The only case I have had is a gentleman who is yet under my observation. He has been suffering for about ten years from organic strictures impermeable even for the thinest bougies. He told me that, though he had been under the care of many distinguished surgeons, no one could ever succeed in introducing a catheter to his bladder. On the 20th July I introduced a French catheter, No. 3, up to the principle stricture, situated in the prostatic part of the urethra, the prostate itself being enormously enlarged, and by a very simple contrivance, directed the electrolytic action of the negative pole upon the stricture during two minutes. Immediately, to my great astonishment, the catheter passed within the bladder, and an immense quantity of turbid and decomposed urine was discharged. Since this the patient has been able to pass urine easier than he has ever done before. On the 24th July I repeated the operation with the same result, but using catheter No. 6 of the French scale; and I can now introduce Nos. 8 and 10 without resorting to electrolysis. So far as I can ascertain, the prostate itself does not seem to be enlarged any longer.

In spermatorrhœa this mode of treatment cannot be surpassed. I have had several cases of inveterate spermatorrhœa, which all yielded to a single or to repeated electrolytic treatment of the prostatic part of the urethra. I am sure that those who have once tried this method, will find it far superior to all others, which are comparatively tedious and uncertain.

The first discoverer of the electrolytic treatment was Crussel, of St. Petersburg, Russia. Already in 1839 he demonstrated experimentally the different effects produced by the different poles, and used electrolysis in the treatment of strictures, exudations, tumors, and ulcers. A number of others followed him, amongst whom one of the most successful is undoubtedly my friend Dr. Moritz Meyer, of Berlin. Dr. Althaus has quite recently improved the method and shown the great importance of the negative pole in the treatment of tumors. Certainly every observer will agree with him that electrolysis, besides annihilating the pain, acts in a threefold manner, viz.: 1. Through mechanical disintegration of the tissues by the nascent hydrogen; 2. Through the dissolving action of the accumulated free alkali (potash, soda, and lime); 3. Through the local modification of nutrition (by means of the vasomotor nerves) of the parts brought under the immediate influence of the current. To these local effects I can now add, from my own experiments and observations, the constitutional effect of electrolysis, which latter especially makes makes this method invaluable in many hitherto incurable diseases. One of its great advantages is that it is never followed by inflammation, suppuration, sloughing, or other disturbances, and that the patient can continue his usual occupation and mode of life.

The electrolytic treatment is called to open a large field for surgery, and will be applied very soon to a variety of surgical diseases, to the advantage of the profession and the benefit of suffering humanity. The surgeon now, besides his biological knowledge and the use of his mechanical appliances, will acquire and appropriate to himself the knowledge of physics, electro-physiology, and the management of the complicated galvanic apparatus.—*Medical Record, N. Y.*

ANEURISM OF THE ASCENDING AORTA TREATED BY GALVANO-PUNCTURE.

Sig. Ciniselli (*N. Y. Med. Journal*) successfully treated at the hospital of Cremona, Italy, an aneurism of the ascending aorta by galvano-puncture. The patient, a male, 46 years old, a coachman by occupation, had a rounded tumor to the right of the sternum, elevated from one to one and a half centimetres transversely, somewhat less vertically. This aneurismal tumor was formed by a curve limited to the 3rd and 4th ribs, and the third intercostal space, nearly doubled in extent. The pulsation was quite strong in the centre of the intercostal space. The operation by galvano-puncture was performed as follows: Three needles of polished steel, one millimetre in diameter, were plunged into the third intercostal space; the first at a distance of one centimetre and a half from the sternum, the others still farther from the median line, and about two centimetres apart; they were all three shaken violently by the pulsations of the aneurism. The electric current was derived from a voltaic pile of thirty couples, having the dimensions of ten centimetres square, and in which the exciting element was a saturated solution of sea-salt. Altogether the current was applied for forty minutes. The skin covering the tumor was red and tumefied. The patient was ordered to keep his bed for three weeks, digitalis being administered to moderate the force of the circulation, while, at the same time, he was placed upon a strong meat diet. He left the hospital 43 days after the operation. 58 days after the operation, the tumor had disappeared, leaving but a slight tumefaction, upon which the eye no longer distinguished pulsations. Seventy-four days after the operation, the patient feeling entirely restored, and tired of doing nothing, resumed his previous occupation. —*Med. Record.*

INDIRECT OSTEOPLASTY.

Prof. Billroth, in a contribution on the results of operative proceedings for favoring the regeneration of bone from periosteum, states that, in diseased conditions of the full-grown hollow bones of adult subjects, the periosteum resembles that found in early life, in being lined by a layer of cells which may be converted into irregular and luxuriant masses of osseous tissue. This progress is observed in cases of ostitis and acute periostitis, particularly in syphilitic subjects, in whom there is a great tendency to the formation of osteophytic growths. The sanguine expectations with which periosteal osteoplastic operations were undertaken have not, however, been fulfilled. In the first place, the surgeon has no power to limit or control the abundant formation of bone-cells from diseased periosteum; and, again, the newly formed bone after a time contracts like other regenerated connective tissue, and finally wholly disappears. Artificial osteogenesis may be produced in children, after resection, when the wound heals by primary intention; but it fails in adults, and when the wound remains open for some time, with profuse suppuration. Rhinoplastic operations, in which flaps of periosteum had been detached from the frontal bone, though followed by formation of osseous tissue in the new nose, were ultimately unsatisfactory in their results, in consequence if the absorption of this tissue, and of the formation of an immovable and tense cicatrix on the forehead. The transplanting of periosteal flaps in operations for cleft palate is not approved of by Billroth, in consequence of the great difficulty of the proceeding, and of its slight utility. In cases of necrosis of the gums from phosphorus-poisoning, success has frequently attended periosteal resection when the formation of new bone was not prevented through profuse suppuration. The formation of a perfect maxillary bone must not be expected; in regeneration of the upper

jaw, the antrum is lost, the bone itself is flattened, and the cheek sunken. In resection of joints, periosteal operations, in consequence of the softened and relaxed condition of the membrane, have not resulted in marked success, except in a few cases, in which they were practiced on young subjects, and where healing was perfected without severe symptoms. —*Allgemeine Weiner Medizinische Zeitung*, No. 49, 1868.—*New Orleans Medical Journal.*

BY W. W. MINER, A. B.

Prof. Lister, of the University of Glasgow, has, in the June number of the *Lancet*, an article on the *Antiseptic system of Ligature.* He proposes to avoid suppuration of surgical wounds by means of an antiseptic bath, and, by using for ligatures, animal tissue that shall be absorbed, thus allowing immediate and complete cicatrization. He cites three experimental cases, in one of which he uses strips from the peritoneum of the small intestine of an ox, in place of the ordinary silken thread. A sound cicatrix was fomed in about a week; and, at the end of a month, the greater portion of the ligature was found to be absorbed and replaced by living fibrous tissue. The knot contained fragments of the original peritoneal tissue in process of replacement, while a firm living fibrous cord, supplanting the original ligature, encircled the artery, and was continuous with its outer coat. He recommends a cord prepared from the small intestines of sheep, which has been treated with a solution of carbolic acid in five parts of olive oil, in which a little water is diffused. Great care is taken to destroy all germs of putrefaction which might enter the wound, by the use of carbolic acid solution. Prof. Lister recommends "torsion" in the case of all the small arteries.—*Brit. Med. and Surg. Journal.*

PRACTICE OF MEDICINE.

WHAT IS TYPHOID-PNEUMONIA?

Grissole says that half of the cases of pneumonia occurring in persons with chronic disease of liver and kidneys, and nearly all in those who have chronic disease of the nervous centres assume the adynamic or typhoid form.

That this kind of pneumonia may closely resemble typhus fever, is proved by the fact, now considered to be tolerably well ascertained, that Pinel, one of the ablest systematic writers of France, drew his descriptions of the so-called dynamic and ataxic fevers almost exclusively from cases of pneumonia occurring in old persons. He was physician to Salpetriere—a hospital for aged people, all of whom were above the age to which typhoid fever of Paris is limited. Pneumonia is now found to be one of the most frequent and fatal diseases of this hospital—and in a large number of cases it presents the same general assemblage of symptoms given by Pinel as characterizing adynamic fever.

Some physicians think that the expression of the countenance is of itself sufficient to characterize typhus fever, but a dull, heavy flush of the face occurs in pneumonia, and the look may be heavy, languid and dull.

Cough and expectoration may be absent, and the patient may not complain of his chest; but, his breathing is generally laborious, and the lips livid, although the skin may be almost natural. In very weak subjects, bronchial respiration is absent in at least one-half of all cases; owing partly to the great debility of the patient which prevents him or her from inspiring sufficiently deeply and strongly to produce the tubular sound; and partly to the fact that splenization is more common in the second stage than the firm hepatization which conveys the sound from the air tubes through an almost solid lung.

Hence large crepitation, or muco-crepitant rhonchus is more frequently heard than tubular, or bronchial respiration.

This so-called typhoid-pneumonia is also apt to occur during the course of delirium tremens in broken down subjects; the prostration of strength and recumbent position of the patient then favors the congestive engorgement, or sub-inflammation of the posterior lobes of the lungs.—*Medical Gazette.*

WHAT IS PNEUMO-TYPHUS?

Nothing is more common than for Typhus to become complicated with Pneumonia, whose invasion is seldom indicated by any unusual dyspnœa, or expectoration, or by any of its common symptoms. This so-called Pneumonia is often the cause of a fatal termination of typhus. In the young and robust, it may be suspected from the occurrence of a sudden and marked increase of fever; but in old or much enfeebled patients, it comes on, marked only by a sudden prostration of strength and loss of consciousness; the skin becomes harsh, the excretions fetid, the teeth and tongue covered with a fuliginous coating; while coma and trachial rattle announce the near approach of death.

Cancer is also apt to be followed by Pneumonia with some of the above symptoms. In 22 cases the upper lobes were chiefly affected; very old people seldom recover. The symptoms of meningitis complicating pneumonia are obscured, the patient is often delirious, but becomes comatose towards the end.

In five cases there was jaundice, three of which were fatal, but no lesion of liver was found.

Of nine cases in first stage, only one proved fatal, and in that pneumonia was double; of forty-six in the second stage, seventeen died; of six cases in third stage, all proved fatal. The older the patient and the more feeble, or diseased originally, of course the more fatal the case proved.—*Buffalo Med. and Surg. Journal.*

WHAT IS SENILE-PNEUMONIA?

It is merely a ramollisment, or splenization in which the lungs are soaked as it were with dissolved blood, and so much softened as to be easily lacerable and reducible into a soft pap on pressure. Hence it is much more frequent in old and enfeebled subjects than in younger patients; it is frequently associated with disease of the left side of the heart.

There are two varieties of attack. It may be either sudden and manifest, setting in with a chill, pain in the side, cough, etc., or, it creeps on insidiously, and is well established before its existence is even suspected.

In March and April it is almost always manifest; often preceded for several days by headache, general languor, coryza with or without epistaxis; flying pains in the limbs and chest; when the Pneumonia is fairly established, stupor and adynamia quickly set in.

In the second or *latent* variety, there is no chill or pain; the patient only feels ill at ease, and altogether more feeble; the breathing may be hurried and irregular, with some paroxysmal cough and difficult expectoration of phlegm. The

skin may be merely warm, and tongue dry, without either cough or disturbance of breathing, although the patient may have been subject to asthma, or chronic cough. In short the only symptoms may be general malaise and feebleness. —*Buffalo Med. and Surg. Journal.*

TREATMENT OF DIABETES BY PEROXIDE OF HYDROGEN.

The great hopes which were entertained of the action of this remedy seem to be fading away. Dr. Allbut has given the solution of peroxide of hydrogen and the so-called ozonic ether a long and careful trial in four cases of diabetes; but the want of success in each case has deterred him from submitting any more diabetic patients to the same useless procedure.

The four cases were chosen as representing four degrees of severity of the disease. The patient, who was taken as an example of the extreme stage, was treated with increasing doses of peroxide of hydrogen for six weeks. No good effects were noticed, and the patient died a short time after the discontinuance of the medicine.

Two of the cases were in private practice, and two were in the infirmary. The therapeutic experiment was carried out in the infirmary with great care. The two patients were taken in at the same time, and their weights, quantity of urine, amounts of water drank, and specific gravities of urine were taken daily. For about ten days they were placed on an ordinary diet (some restriction in the quantity of potatoes and bread only being made), and the daily variations noted. The peroxide of hydrogen, the purity of which was guaranteed, was then given in increasing doses, until the two patients were taking half an ounce of the liquor every six hours. In one, the slight daily decrease of weight was arrested for a day or two; but this was apparently accidental, as it soon re-commenced. It was intended to publish the columns containing the daily weight, water drank, urine passed, and specific gravity; but as no important variations were seen in them on administration or withdrawal of the medicine, it seemed unnecessary. Both patients improved subsequently on carbonate of ammonia and restricted diet, though one of them, as stated above, ultimately died. The peroxide of hydrogen was given for about two months in each case.—*Lancet,* July 31, 1869.

THERAPEUTICS.

ON MURIATE OF AMMONIA AS A REMEDY FOR SOME NERVOUS AFFECTIONS.

"Muriate of ammonia is one of those commonplace and unattractive substances which we, in this country, are little apt to credit with extensive remedial properties in disease." We quote the first sentence of an eminently suggestive paper by Dr. Anstie (The Practitioner, December, 1868), which treats principally of the employment of this remedy for the relief of (1) various kinds of pain, and (2) of certain cases of suspended secretion dependent on nervous exhaustion. Before very briefly describing some of the applications mentioned, we think it right to state that we are by no means prepared to coincide in Dr. Anstie's therapeutics, in so far as this is founded on physiological data. Under the first class the disease termed *myalgia* is said to be specially amenable to treatment by muriate of ammonia. Doses of from ten to twenty grains are recommended, and by their use this disease may be cured as certainly as ague by quinia. This class also includes various neuralgias proper, such as *migraine* (usually referred to disorders of digestion) and *clavus hystericus*; both of which Dr. Anstie believes to be distinct and primary neuralgias of the fifth cranial nerve. Of all the internal remedies that can be employed in these headaches, none is apparently so beneficial as the muriate of ammonia, its virtue depending on its mildly stimulant properties. It should be given in the same doses as for myalgia. In *intercostal* neuralgia, and especially in that form met with in suckling women or in phthisical patients, this remedy is also of great value, frequently "pain being relieved in half an hour." It may also be used with advantage in the milder varieties of *sciatica,* which occur in young and debilitated persons; and in that somewhat obscure form of neuralgia termed *hepatic.* Among the therapeutic applications to relieve suspended secretion, Dr. Anstie expresses his conviction that muriate of ammonia "is the most powerful of all functional restoratives" of suspended bile secretion. He especially recommends it in those cases where the disease is produced by severe and exhausting mental excitement; and mentions that he has seen several instances in which two or three doses of twenty grains have caused a marked re-commencement of biliary secretion. All these, and various other therapeutical indications, are founded on the supposition that this remedy is a "pure tonic stimulant" to sensitive and vaso-motor nerves.—*Edin. Med. Journal,* June, 1869.

LIME-WATER IN THE TREATMENT OF BRIGHT'S DISEASE.

Kuchenmeister recommends in the treatment of Bright's Disease, and of nephritis after scarlatina the use of large doses of lime-water, theoretically from its having the property of dissolving proteine. Lyon Médicale details the treatment, and says that caustic lime in solution, or any of the soluble salts of lime, will answer equally well. He has seen the urine increase from 30 grammes to 120 the first day, 180 the second, 300 the third, and up to 1020 the seventh day, under this influence; sometimes a slight hemorrhage necessitates the disuse of this treatment; but the quantity of albumen in the urine sensibly diminishes.—*Med. Press and Circ.,* June 30.

THE PHILOSOPHY OF CATAPLASMS.

The *Journal des Connoissances Medicales* publishes an article, by Dr. Herbert, on a subject which may not be uninteresting to families, viz., cataplasms, those especially which have mustard for their base. The seeds of the black kind, which in a pulverized state are used for poultices, owe their properties to a liquid, acid, and volatile substance, being nothing but essence of mustard. This, however, does not exist ready formed in the seed; it is generated by a kind of fermentation, caused by the action of an albuminoid body, called myrosine, which plays the part of leaven, on a peculiarly fermentesible compound, mysonate of potash. This transformation, which has been called *sinapisic,* can only take place by the intervention of water at a temperature higher than freezing-point, and lower than 75 degrees centigrade, those being the usual conditions requisite for producing fermentation. This is a circumstance which is not commonly taken into account in practice. The generation of essence of mustard diminishes under temperature ranging between 50 and 75 degrees centigrade, and entirely ceases at the latter. Hence, boiling water, or even such that cannot be borne by the hand, will spoil both the poultice and

the sinapised foot-bath. Again, alcohol, acids, metallic salts, and any other agents having the power of stopping fermentation or retarding it, are detrimental. Besides the two principles mentioned, through whose joint action the essential oil of mustard is produced, the seeds of this plant contain various others, among which there is a fixed and inactive oil, having some of the properties of that of rape-seed, and which may easily be extracted from mustard-powder, either by strong pressure, or better still, by acting upon it by lixiviation in sulphuret of carbon. When this oil is extracted, what remains is much more powerful, and will moreover keep indefinitely. Many years ago, M. Robinet attempted to bring this mustard-flour, deprived of its fixed oil, into general use; but prejudice and routine proved too strong for him; and it was not until this powder was gummed to paper, then cut into squares, and sold in elegant tin boxes, that it came into fashion. But what every family should keep in mind is this, that mustard poultices ought not to be made with hot, but with lukewarm water.

THE ACTION OF TARTAR EMETIC.

The importance of deeper investigations into the action of medicines than any yet realized in this country is made apparent by some of the more searching inquiries of German experimenters. One of these, Dr. Nöbiling, has lately been experimenting on himself and on some of the lower animals with tartar emetic, and one of the conclusions at which he arrives, seems to us somewhat startling. The following are his conclusions:—1. There are two independent modes of action in tartar emetic; one on the heart, and the other on the intestinal canal.—2. The action of the potash is on the heart, and that of the antimony is on the intestines. 3. Potash has a directly paralysing action upon the heart. 4. The tartaric acid is without any effect upon the system.

The conclusion to which we direct special attention is the third, as to the paralysing power of tartar emetic residing, not in the antimony, but in the potash. Dr. Nöbiling endeavored to ascertain the physiological effect of the different ingredients. He found "that while a small dose of potassio-tartrate of antimony caused death in a frog, the same dose of sodio-tartrate of antimony produced no effect." Nowadays, when we are using the salts of potash by the ounce, or even by the pound, it seems rather startling to be told that the depressing power of tartar emetic on the heart resides in the potash, and is so great that Nöbiling recommends the ammonio-tartrate of antimony, instead of the potassio-tartrate, for therapeutical purposes. We draw attention to Nöbiling's conclusions, not because we are convinced of their soundness, but to illustrate the need for a sounder therapeutical science, that will tend to harmonize common and scientific observation. It is quite possible that potash has a depressing power on the heart. But there is a terrible inconsistency between Nöbiling's conclusions and some of our best daily practice.—*Lancet.*

OBSTETRICS.

THE FORCEPS.

In the use of these instruments there has been a remarkable reaction from the overcautious practice which prevailed towards the end of the last century, and which was due in a great measure to the interference and example of the illustrious Denman, who taught accoucheurs to place an almost Abyssinian confidence in the powers of nature, and never to resort to instruments unless they had the most positive evidence that she was unequal to her task. He went so far as to insist that the head of the child should have rested for six hours as low as the perineum, *i. e.*, in the situation which will best allow of their application, before forceps should be applied, although the pains should have altogether ceased for that time.

In Denman's time there were no examinations in midwifery, and the science of obstetrics was slighted and despised by medical colleges; but now when medical men are so much better instructed in midwifery, the forceps are much more frequently resorted to, and with the very best results. The statistics of the Dublin Lying-in Hospital prove that the maternal deaths have steadily decreased as the forceps have been more frequently and earlier used. Latterly they have been brought in play 232 times in 6053 cases, or about once in 26; Carus, of Dresden, uses them as often as once in 14 cases; Busch, of Berlin, once in 12; Siebold, of Berlin, once in 7.

Swayne now makes it a rule to apply the forceps whenever the head has remained immovable in the pelvic capacity for more than two hours. But if the head advances ever so slowly, while the pulse continues good, the abdomen remains free from pressure, and there is no obstruction to the emission of the urine, then the forceps should not be used until the child is dead.

Swayne has applied the forceps ninety times; of these cases, 69, or more than three-fourths, were in primaparæ. This might be expected, for in the forcep cases there is generally both increased resistance and diminished uterine power; both of which are apt to occur in first labors, especially if the woman be rather old. Of Swayne's 69 cases in primaparæ, 10 were 38 to 43 years old.

In 41 cases out of the 90, there was want of power with slight want of room in the pelvis.

In 32 cases out of the 90 there was want of power only. In 21 cases there was want of room only.

Convulsions occurred in four cases; and prolapse of the cord in two.

Four cases died in which the forceps were used, viz., two from puerperal fever, one from bronchitis, and another from malignant scarlet fever.

Swayne prefers the short forceps of Simpson, although he uses the long kind occasionally.—*British Medical Journal—Medical Gaxette.*

OPIUM AS A PARTURIENT AGENT UPON THE UTERUS.

P. C. Barker, M.D., Morristown, N. J., (*N. Y. Med. Journal*), has discovered that opium is an invaluable parturient agent in cases of this character: Before the expulsive contractions commence which terminate the process, the circular fibres of the uterus should relax, and the "os" become widely dilated; but irregular contractions of the different sets of fibres, or contractions of the circular alone (constituting false pains), or rigidity of the "os uteri," due to tonic contraction of its circular fibres, often prevent this physiological dilatation, and prove the source of great distress to the patient and annoyance to the obstetrician.

Further observations in a large number of cases of varied character, have convinced him that opium, instead of having a general anodyne effect upon the uterus, stimulates the fibres of the body of the uterus (longitudinal and oblique), and relaxes the circular fibres of the os. He is fully persuaded that *opium never did or can arrest a physiological* labor.

In *abortions* he considers it an invaluable remedy, facilitating dilatation, diminishing hemorrhage, promoting the expulsion of the placenta, and lessening suffering.

Ergot, on the other hand, by causing contraction of the circular fibres, retains the placenta, and therefore should rarely be given (in abortion) until after the fœtus and secundines have been expelled. Opium was used in three cases of *placenta prævia*, one at the sixth month, and two at term, saving the mother in each instance. Two important indications are met in *placenta prævia*, when this drug is given: 1st. It facilitates dilatation, thus shortening the period of greatest danger. 2nd. It promotes the expulsive power of the uterus. It also serves to lessen hemorrhage by a special hæmostatic action.

With respect to the mode of administration, he has generally employed solid opium pills, grs. 1 to 3, or sulphate of morphia, gr. 1-6 to ½ (the latter given dry on the tongue if nausea is present), at term.

In abortion, if seen early, he gives enemas of corresponding strength, usually employing from ʒss to ʒj doses of opii tinct. in a tablespoonful of warm water, to be repeated after three hours if the pains continue, or later if they return after being quieted.

The theory set forth in this paper explains phenomena in the action of opium upon the gravid uterus which have hitherto, from the time of Denman to the present, been regarded as exceptional.

His object in calling the attention of the profession to these peculiar properties of opium is, the promotion of a wider knowledge and a more general application of them in practice; and he feels assured that, if opium is given in the conditions and doses above indicated, it will not disappoint the obstetric practitioner.—*Medical Record.*

MISCELLANEOUS.

A VISIT TO M. NELATON.

Some recent numbers of the *Journal de Medecine de Bruxelles* contain a communication from L. Delstanche, of that city, on a visit which he paid to M. Nelaton last autumn. The writer commenced his exploration speedily enough, for while waiting his turn in the great Surgeon's *salon* he so ingratiated himself with a lady he found there, the subject of ovarian disease, that he obtained her permission to be present at the consultation. I was much surprised, he says, to hear M. Nelaton say that had this been a unilocular cyst he would have first tried iodine injection, seeing how little success has attended this treatment in the hands of others, including Krassowsky, the most recent writer on the subject. He replied that he had perused Krassowsky's work, but that Surgeon, in fact, had operated in a chance manner, without observing any rule, while he himself followed an indication which was well-nigh certain. After having injected a large number of these cysts with very various results, he came to the conclusion that when the fluid is sticky and thready between the fingers, like mucus or pus, the iodine injection has no chance of success, while when it does not give rise to filaments, but resembles serum or urine, and whatever its color may be—pale, deep, or sanguinolent—there is the same chance of cure as in hydrocele. "I agree," he added, "that this is a somewhat empirical conclusion, but empirical means are not always to be disdained; and, moreover, the rule does not apply only to small and recent cysts, but has been found to hold good in those which date back several years, and have attained an enormous size. For the success of the procedure a trocar of not less than three millimetres in volume, and from twenty to twenty-five centimetres in length, is essential." In multilocular cysts, whatever may be their contents, M. Nelaton rejects injection.

As to ovariotomy, he observed that the fact of his having imported it into France had been contested, but he had ample proof of that. How far we may trust academies was seen by the general cry of reprobation which was raised when the operation was first mentioned at the Academy of Medicine, and when they could not find terms harsh enough to stigmatise this *savagerie*. Soon afterwards he saw it practiced in Paris itself, and now it becomes a question of who has had the honor of naturalizing it. M. Nelaton has himself performed it sixteen times, and nine times with success; and if his success has not been greater, it must be recollected, he observed, that he commenced amidst the most vehement opposition, and could only then venture upon cases reduced to the last extremity. Even in these desperate circumstances he succeeded in more than one-half of his cases. Although one of the foremost to testify to the ability of the English Surgeons, he maintains that much of their great success depends upon the fact that they operate in good time before the development of the cyst and repeated punctures have produced adhesions and damaged the constitution of the patients. Such is pre-eminently the practice of Spencer Wells; and now that French Surgeons, like M. Nelaton's pupils, MM. Pean and Labbe, are beginning to follow in the same line, their success is not less striking. In explaining the poor results that had hitherto followed the performance of the operation in Belgium, M. Nelaton observed that this might depend on various causes, such as condition of the patient or that of the locality, as well as the mode of procedure. Of all operations, ovariotomy is the one in which we meet with the most unexpected occurrences; and to execute it well it is necessary to have often seen it done and to have practiced it oneself. It is by practice that simplification of its procedure has been attained, and that we have come to recognise the importance of things once deemed only secondary. But failure does not take place so much from the want of skill in the operator as from the constitution of the subjects and the vitiated atmosphere of Hospitals, death almost always taking place when the operation is performed within their walls.—*Med. and Surg. Reporter.*

A MEDICAL WITNESS AT GEELONG.

We (*Lancet*) have received from a correspondent a portion of the report of a trial at Geelong (Barnett et Uxor vs. Reid), containing the following choice morsels of medical evidence In England we are accustomed to see medical witnesses very freely sat upon by all the representatives of the law; and, without altogether admiring the vivacity that appears to characterize antipodean litigation, we cannot but feel pleasure that a member of our own profession should prove himself so very much too strong for his natural enemy and assailant—the counsel on the other side. Mr. Reid, in the box, cross-examined by Mr. Quinlan, counsel for plaintiffs. Quinlan—You have an extensive private practice in addition to your hospital duties? Reid—I have a very good consulting practice. Most of my patients come from far, live in the various hotels in the town, and do not occupy my time nearly

so much as a very general moderate practice. In point of fact, I never am days in attendance on a midwifery case, and do not go out half a dozen times a day to visit a child who has eaten too much plum pudding. That is the business of a general practitioner, and not of a consulting surgeon. Quinlan—What is your income from your private practice? The Chief Justice—I think you are going too far, Mr. Quinlan. Foreman of Jury—It appears to me, your Honor, that the counsel for the plaintiffs is occupying our time needlessly in subjects that should not come before us. The Chief Justice—I perfectly agree with you. Quinlan—Could you give us any idea of the time you take to make an examination of your private patients? Reid—The time I take varies; but I will give you an instance that occurred not long ago. A gentleman called upon me with a husky voice, stating that he suffered from rheumatism, and wished my opinion. I observed that he entered my room with his head and chest bent forwards. In reply to my queries, he admitted that he had pain in the back and in the left shoulder; that he had great difficulty in swallowing, the food appearing to stick in his throat; that at night he was constantly obliged to bend his body well forwards to get relief, and that he had a difficulty of breathing. On putting up his shirt, I found the heart's apex outside the nipple line, and there was little respiratory action in the left lung. I told him at once that he had a small aneurism pressing upon the left bronchus, and that if he did not take care he would die suddenly. He paid me a guinea and went away. The time I have taken to describe this to you is about the same time I devoted to the patient. Quinlan—You state that most of your private patients come from a long distance. Reid—Yes, they do. Quinlan—Then they must be very severe cases. Reid—I do not suppose that a man would come many hundred miles to me if he could be cured by a general practitioner in his district. Quinlan—Then they have long stories to tell you. Reid—Yes, they have. Quinlan—And how, then, do you get through your work? Reid—By attending to my business, examining the patient thoroughly, and preventing his indulging in any irrelevant conversation. The Chief Justice—Oh! that I could do the same; wouldn't I get through my work quickly. [Laughter.] Quinlan—Ain't you very rough and abrupt in your manners, and do you not imitate Abernethy in this particular? Reid—I imitate the peculiarities of no man's manner. Quinlan—Don't affect to misunderstand me, sir. Would you not—like Abernethy—order a patient who was addressing you to put out his tongue and hold it there? Reid—I never did such a thing in my life; but I have not the slightest doubt that if you consulted me I should be obliged to do so in your case. [Loud laughter.] Quinlan—It appears, doctor, that you not only have the sympathies of the bulk of the medical profession on your side, but of the bar. The Chief Justice, to Mr. Quinlan—And, you may add, of the Judge also.

FUNGUS ORIGIN OF SCARLET FEVER.

Hallier, who has distinguished himself so greatly by his investigation of the cholera fungus, has discovered something similar in scarlet fever blood. He says he has never seen such an immense number of micrococci in the blood of any other infectious disease. These are at first as small as the finest pin-point, or the most minute granular matter. They are present in far greater numbers than the blood globule themselves; both swimming free in the serum and accumulated in granular masses and groups. They both accumulate on and penetrate into the blood globules. The white corpuscles as well as the red globules are supplied with them, almost without exception. Just as there is a great resemblance between the seeds, roots, stems and leaves of plants, so do the microscopic germs develop themselves into sprouts and shoots which resemble those of many other microscopic plants. But Hallier has discovered three immature and three mature forms of spores, which he considers characteristic of scarlet fever poisoning, and names them TILLETIA SCARLATINOSA. J. C. P.

*** Prof. Hallier, in his researches in Microscopic botany, has cultivated many fungi up to the reproductive or seed bearing stage. In this mature (coniothecal) form, characteristic specific differences are noticeable between the different plants; but during the earlier stages of development it is almost impossible to distinguish between them. Nearly all begin as micrococci, and pass through the various forms of torula and penicillium, before showing marked individual characteristics.—*Medical Gazette.*

INSANITY CURED BY REMOVAL OF CARIOUS TEETH.

Mrs. B., aged 28, has had two attacks of insanity, from the last of which she was entirely relieved by the removal of a number of carious teeth. This lady has been twice married, but has never borne children, and has been subject to dyspepsia, neuralgia, and occasional slight attacks of menorrhagia. Her insanity at first was but a slight aberration, and evinced itself in a lavish bestowal of her property to her friends and neighbors. Soon it became a raving mania, so that it was necessary to seclude and confine her. She was taken to an insane asylum, where she was treated nearly two years without being materially benefitted. About this time, she came under the treatment of Dr. Perry, of Maury Co., Tenn., who learning that she suffered much at times from neuralgia involving the teeth, face, and contiguous parts, suggested that her decayed teeth and roots of teeth should be extracted. This was accordingly done, and was followed immediately by relief, mental and physical, and ultimately by complete recovery. She is now quite well, and attends in person to her household affairs, and for the past six months has remained perfectly free from insanity.—*American Journal of Dental Science*

"SWEET QUININE:" WHAT IS IT?

The editor of the *American Journal of Pharmacy* has satisfied himself by a series of experiments (see *American Journal of Pharmacy*, July, 1869) that the so-called sweet quinine is not quinine at all, but mainly the alkaloid *cinchonia* precipitated from the sulphate, dried and triturated with an impure glycyrrhizin prepared from liquorice root. Cinchonia is very insoluble, requiring nearly 4000 parts of cold water; hence the tastelessness of "sweet quinine," and its bitterness with acid or alcoholic fluids, which salify and dissolve it. From his various experiments he concludes that "sweet quinine" consists of about three parts of cinchonia and one of impure glycyrrhizin. Quite possibly there may be some cinchonidin also present in small quantity, but no examination has been made for it.

The thanks of the community are due Professor Proctor for this investigation and disclosure.—*News and Library.*

CHOREA CURED BY ETHER-SPRAY APPLIED TO THE SPINE.

M. Mazade records (*Lyon Medicale*, 4 *Juillet*) an interesting case in which severe chorea was effectually treated in

the above manner. The patient was a young man aged 18; the disease had lasted many months, and after a brief interruption (during an attack of varicella) had returned with increased violence. Fifty grammes (14 drachms) of ether were applied, in spray, along the whole length of the spine with a Richardson's apparatus; the skin was slightly reddened, but not rendered anæsthetic. The next morning the patient announced that he felt much better, although the external symptoms were not very materially changed. The ether douche was administered three times more, and a remarkable improvement was then observed; the treatment was therefore continued, and at the end of about eight days the patient could *write* legibly, whereas the affection of the hands had been so severe as to entirely prevent even his feeding himself. He was so well as to be about to leave the hospital, about three weeks after the commencement of the ether treatment, when he was attacked with typhoid fever. The latter affection proved slight, and was not followed by any return of the choreic symptoms.—*The Practitioner*, August, 1869.

CALABAR BEAN IN TETANUS AND TRISMUS NEONATORUM.

Dr. Monti has been trying this treatment in four cases of tetanus in new-born children, and one case of traumatic origin in a boy four years old. The traumatic case and two of the infants recovered; the remedy was mostly administered by subcutaneous injection. The author remarks on the extreme rarity of favorable results in this disease, and concludes from his own experience and that recorded by other observers, that Calabar bean offers a much better prospect of positive therapeutic results than does any other drug. The proper dose for subcutaneous injection of an infant a few days old seems to be 1-30 to 1-6 grain of the extract; in the boy of four years old Monti injected as much as ½ grain, and a total of 6½ grains of the extract were given altogether, by stomach and by skin.—*The Practitioner, August*, 1869, *from* JAHRB. F. KINDHERHEILKUNDE, MAI.

SECALE CORNUTUM IN DIARRHŒA.

November 5th, 1868, Henry Duggan called at my office, stating that his wife, æt. 32, had been troubled with diarrhœ; for several days there was considerable tenesmus; she had taken several doses of castor oil with no apparent benefit, and as she was in the third month of pregnancy, was fearful of producing miscarriage by using active remedies. I made and put up a prescription for her, and by mistake he took a two-ounce vial of *wine of ergot*, and gave it as I directed him to use the other, "a half an ounce after each stool." I discovered the mistake five hours after, and went at once to see her; found her quietly sleeping; she had taken three doses. After waking her, she said she felt better than she had for several days. I have tried it twice since with her, and in three other cases of diarrhœa in pregnant females at different stages of gestation with the most happy results. Will some one give it the rationale?—W. J. HILLIS, M. D., *in the Med. and Surg. Reporter.*

TURPENTINE IN UTERINE HEMORRHAGE.

Mr. Bradley, of Martley, near Worcester, a few years since, published some very valuable records of the utility of turpentine in hemorrhage of all kinds. As a restorative in certain cases of prostration, especially such as occasionally arise during the puerperal state, it is no less serviceable. Sometimes after a severe labor, accompanied or not with hemorrhage, great debility will ensue about the third day, characterized by a rapid pulse, tympanitic abdomen, and other symptoms not connected with peritoneal or other fever, yet threatening the advent of a typhoid condition. Here turpentine, both as an injection and by the mouth, is invaluable. Mr. Yarroway, of Faversham, records (*Brit. Med. Journ., July* 10, 1869) a case of this character occuring in a primiparæ on the third day after labor. One ounce of turpentine, diffused in mucilage, was injected as high as possible in the rectum; the patient had been previously insensible, with cold and sweating skin, and commenced shrivelling of the surface, but in four or five minutes after the turpentine injection, the respiration became freer, she soon opened her eyes, deglutition became possible; after which nourishment was administered with the best effects.

SENSIBLE REMARKS ON THE PROGRESS OF GYNECOLOGY.

J. Mathews Duncan, Edinburgh, in his work on "Perimetritis and Parametritis," truthfully remarks with reference to the diseases of women: "Foolish and unscrupulous men have a peculiar tendency, easily accounted for, to cultivate the diseases of the sexual organs. And the history of the progress of gynecology in our day would, if truly given, cast as much disgrace on some individuals as honor upon others. Fortunately its worst side will probably never be thoroughly exposed; for the fittest of fates—oblivion—awaits much that is now vaunted; the discovery and diligent treatment of diseases which do not exist; the use of treatments the danger of which is greater than that of the diseases; the recommendation of remedies and operations regarding which little more is known than their names; the facile juggling with remedies of which it is the one sufficient recommendation to have a new name; the systematic concealment of disasters resulting from such treatments. Great progress is certainly being made; but 'blinding dust' is the chief result of many of its most notorious if not famous promoters."—*Med. Record.*

ONE pound of water distilled from a pound of prunus padus contains in 1,000 grains, prussic acid ⅛ grain if distilled from the flowers, ¼ from the leaves or the bark.—*Pharm. Zeitsch f. Russl.*

PAMPHLETS AND EXCHANGES.

SEPTEMBER.

Medical Investigator; Medical and Surgical Reporter; Glasgow Medical Journal; Australian Medical Journal; British Medical Journal; The Druggist; Medical Gazette, N. Y.,; American Journal of Obstetrics and Diseases of women and children; Pacific Medical and Surgical Journal; The Pharmacist and Chemical Record; Edinburgh Medical Journal; Annual Circular and Catalogue of the Bellevue Hospital Medical College; Boston Journal of Chemistry; The Medical Mirror—London; The Medical Press and Circular; The Medical Times and Gazette—London; The California Teacher; Boston Medical Journal; Buffalo Medical and Surgical; Canada Medical Journal; Cincinnati Lancet and Observer; Catalogue of Lindsay and Blakiston's Medical Publications; American Journal of Pharmacy; Dental Cosmos; New York Medical Journal; Nashville Journal of Medicine and Surgery; Richmond and Louisville Medical Journal; Annual Report of New England Hospital for women and children; Galveston Medical Journal; Medical Archives; Medical Gazette—New York; Medical Investigator.

ORIGINAL COMMUNICATIONS.

SHOULD WE BANDAGE AFTER PARTURITION, OR WHEN RIBS ARE FRACTURED?

By W. M. Ryer, M. D.

The abdominal parieties, having accommodated themselves to the enlarged state of the uterus, are, at the end of the term of gestation, distended to an extent that, in many cases, the integuments, cellular, muscular and fibrous tissues become incapable of returning to the condition they were in previous to conception.

The abdominal viscera, accustomed to the support of the abdominal walls, and, during gestation, to a very great pressure from the increasing uterus, are, by the act of delivery, suddenly deprived of the accustomed support and pressure; and following this change, often comes exhaustion, faintings, alarming symptoms, and sometimes mania.

The necessity of support and pressure by artificial means, is so often experienced, that the habit is most general in civilized communities to bandage the abdomen as soon as the uterus is evacuated; and by some practitioners, as soon as the fœtus is expelled and before the placenta is delivered;—a practice I have thought well of and followed, believing that I gave temporary comfort to the patient by relieving that feeling of vacancy, which is often so dreaded, and that I assisted nature in its first efforts to expel the remaining contents of the womb.

The sudden removal from within the walls of the abdomen of so great a mass as the fœtus, placenta, and the liquids compose, demands artificial pressure and support, and custom has applied the bandage.

Every cloth bandage that a recently-delivered woman can support, will work upwards from the hips to the waist; for the reason that the waist is the smaller, and every move of the patient aids the change. From the moment of displacement the bandage becomes ineffectual, if not injurious. Besides these objections to the cloth bandage, as ordinarily used, there are others which have made many able men doubt the propriety of bandaging, and others to refuse the application of them. (Extremes and spasms have ever established the epochs in the history of medicine.) If you introduce the finger into the vagina at the moment when strong traction is made upon the cloth bandage which envelopes the abdomen, you will feel the uterus descend to a considerable extent; and it will be suggested to you, that a bandage too tightly drawn around the abdomen, will have a tendency to press downwards the womb and encourage its prolapsus. Indeed we may believe that disease is often produced by tight belting and weight of petticoats.

Some twelve years past, in treating a case of mania following parturition, I remarked that the abdominal walls seemed to have lost all tendency to return to a normal condition, and hung loose and flabby, to an extent I had never before witnessed. It occurred to me, that to support the loose and hanging parieties was of some importance, and as it could not be done by a cloth, I used the adhesive strips as a bandage.

That which I intended as an accessory, became the principal treatment; and the raving maniac, whom it required two strong men to hold, became calm and reasonable within a brief hour after the bandaging. So surprising an event has induced me to use, often after delivery, the adhesive strip bandage. In many cases where the patients are slow of convalescence, or have weakness of the uterine organs, and have the abdominal walls less firm than they should be, I have used the adhesive strips with marked advantage.

As an abdominal supporter, they are preferable to the various apparatus which are sold and used for the purpose.

Marvellous are the effects of proper bandaging, and disastrous are the results of improper.

All cloth bandages are movable, and tend to make pressure where least desired; besides, by their thickness, they heat the spine and the parts covered.

The method of bandaging I have practiced, is to take about three-fourths of a yard of the adhesive plaster, purchased in every drug store, (less for a slender patient) and cut it in strips parallel with the warp, so that each strip is one and a-half inches wide, and long enough to extend from three or four inches from the spine on one side, over the abdomen, to within three or four inches of the spine on the other side.

Having cut the entire piece into strips, (say ten) and warmed them by a kettle of hot water, or otherwise, I commence at the lower part by drawing the heated plaster from the back of the hips, where the assistant presses the end against the skin: tightly over and above the pubis, and around to the corresponding place on the opposite hip.

Thus is applied each strip above the other, until we arrive at the umbilicus, in some cases one inch above; but too high bandaging is subject to some of the objections attached to the ordinary system.

As adhesive plasters slip and stretch, you will apply them tightly drawn, gathering the looseness and folds of integuments under the plaster. These folds disappear within a few hours after bandaging.

Having thus applied successive strips from below, upwards to the umbilicus, we commence again below, and over the first we apply a second layer of

adhesive strips. The object of this second layer of strips is to give body and firmness to the first, for the abdomen in its lower part requires all the support the most ingenious can give.

Thus the inferior portion of the abdomen becomes encased by adhesive plaster, whilst the epigastric region is free, and the relief is often so great, when properly applied, that patients who have lain upon the bed one or two weeks, bandaged with cloth, will, upon the application of this casing of plaster, ask permission to sit up or to leave their beds.

But one drawback to the use of the adhesive bandage occurs, and that is, with some an itching occurs about the fourth day. This itching passes away by removing the bandage, washing the parts with warm water, and immediately renewing the bandage by fresh adhesive strips, as at first.

Similar to the usual manner of bandaging after labor, is the bandaging by rollers and towels when the ribs are fractured. This cumbersome and unphilosophical wrapping around of the chest, by its heat and pressure, is more likely to produce internal disease than hasten the union of the fractured ribs.

Disarranged, loosened and displaced as soon as applied, they are ineffectual, except for evil.

Without pressure upon the lungs the ribs can be held perfectly still by the judicious application of adhesive plaster, prepared as above mentioned, in strips of one and a half inches in width. Commencing at the sternum, apply the strips obliquely downwards and backwards on the side affected, to the lumbar region; having applied several of such strips, a second layer over the first may be used for the purpose of giving firmness.

For the fracture of ribs upon one side it is not necessary to embarrass the opposite side with bandages, as is so often practiced. From personal experience following the fracture of a rib, I have satisfied myself that the ribs may be held quite as much at rest by the adhesive plaster drawn from the sternum to the lumbar region on the side affected, with the side not affected free from restraint, as they can be by the tightest roller with which injudicious and inquisitorial surgery ever tortured mankind.

EXTENSIVE LESION OF THE SKULL, FROM PISTOL BALL.

By Edwin Bentley, Assistant Surgeon U. S. Army, San Francisco.

C. B., a native of Salem, Mass, and lately a resident at White Pine, by occupation a baker, aged 46 years, in a fit of despondency on the 6th of September, 1869, procured a four-barreled Sharp's pistol, and repaired to a secluded locality in the suburbs of San Francisco, where he discharged one of its barrels into his head. On the following day he was found and taken to the Coroner's office, where, on the 8th, about 48 hours after death, the head was examined in the presence and by direction of Dr. Letterman, preparatory to the inquest. The ball entered the superior and anterior corner of the squamous portion of the right temporal bone, producing a stellated fracture, consisting of a superior fissure extending two inches, a posterior reaching quite to the occiput, and an inferior fissure running anteriorly across the greater wing of the sphenoid bone, to the orbital plate, producing a quadrangular-shaped fracture through the vault of the orbit, with sides from an inch to an inch and a-fourth. From the greater wing also, tranversely across the body of the sphenoid bone, separating the anterior clinoid processes near their base, breaking up the ethmoid bone and loosening the vomer, continuing over to the opposite side making a triangular fracture of the left orbital plate, and ending with a fracture of the greater wing of the sphenoid bone of the left side, running down two inches in depth in the temporal fossæ. The ball was found in the medullary substance of the left anterior lobe, just in front of the fissure of slyvius, and above the third convolution. It was flattened on one side, and rounded on the other, with a slight dent or concavity on the convex surface. The ball carried before it a circular piece of bone three-eighths of an inch—the size of the opening it cut in piercing the skull. The brain was firm, and the course of the ball could be readily traced to the point where it was found imbedded. The extravasation of blood was confined to the temporal muscle of the right side, although a fracture and ecchymosis was observed on the left side on separating the scalp, before raising the calvaria. There was free hemorrhage from the wound and right nostril.

Remarks.—At the time of the autopsy there were no apparent signs of commencing decomposition. Rigor mortis present. Body well nourished, and of medium size. The course of the ball being distinctly traceable in the substance of the brain, there being slight extravasation, and no coagulæ within the membranes, or between the dura mater and the bone. The entire lines of fracture appear to have been made by the single stroke of the ball. The skull at the seat of injury was one-eighth of an inch in thickness, and the bones were nowhere observed to be unusually thin or brittle. The ball weighed 55 grains. The fracture was not simply a seam, perceptible on removing the pericranium and dura

mater, but a "simple fracture with displacements;" so, that on raising the skull-cap, moderate force applied to the sections of the occipital and frontal bones readily separated the anterior and posterior portions of the skull through the course of the fracture, they being retained in position only by the attachment of the soft parts. This case is, in a measure, corroborative of the many facts accumulated by the earlier writers on surgery, to show that fractures on one side of the head occur from blows received on the other; for on exploring the skull, a fracture on the side opposite the wound was clearly observable. And also, creative of suspicion, that many recorded cases of this class of fracture were really continuous through the base of the skull; for from repeated experiments, I have demonstrated by slight maceration, a well-developed line of fracture at the base of the skull, which could scarcely have been detected without. There was no discharge from the ears, either sanguinous or serous—the latter so conclusive, when present, of fracture at the base of the skull; and the former of fracture of the petrous portion of the temporal bone. The special point of interest in this case is, the remarkable mischief produced by a single stroke of 55 grains of lead, when propelled by 6 grains of powder, at short distance.

CASES ILLUSTRATING SOME POINTS IN THE SURGERY OF THE CERVIX UTERI.

By James Blake, M. D., San Francisco.

As the campaign that has been carried on in San Francisco against the integrity of the uterus during the last few months is probably about to close, it will be well before the victims are forgotten, to endeavor to record the facts that it has furnished for throwing some light on the subject of uterotomy. That the members of the profession in this city, must have had many cases which had previously been treated by the uterotomists there can be no doubt, for never was there an onslaught on the uterus carried on more recklessly, and we might almost say more unscrupulously, than that which has been going on here during the last year or two. I consider it the duty of those who have met with cases showing the mischief produced by this most irrational method of treating uterine diseases, to publish them so that those who have not had an opportunity of witnessing analogous cases may not be deceived by the exaggerated statements of success which have been published with the view of bolstering up this most mischievous practice.

Not wishing to occupy more of your space than you can afford, I shall confine myself at present to bringing forward three cases, showing in one the mischief that had been done by uterotomy; another showing that not the slightest benefit had resulted after the patient had been subjected to the risk of division of the cervix some sixteen or seventeen times; and a third showing that an operation was advised for a uterine displacement, and the patient subsequently cured by wearing a pessary a few months. The first case was that of Mrs. M., aged 32, who has been suffering for many years from retroversion combined with hyperæsthesia of the retro-uteral nerves, so that she could not bear a pessary to keep the uterus in its place. This case had proved very obstinate, having been under the care of Dr. I. Meigs, and in fact of most of the gynæcologists in the Eastern States, but without benefit. Nothing did any permanent good, the patient suffered most intensely from dysmenorrhœa, and even between the periods could only take occasional exercise on account of distressing back-ache. The cervical canal was natural and certainly if there ever was a case to be let alone as far as cutting was concerned this was one. The patient however was assured that she could be cured by an operation, and after passing so large a part of her life in suffering, it was not surprising that she was willing to have recourse to anything that offered a chance of relief. She accordingly placed herself under the hands of the uterotomist. The result was what might have been anticipated, the irritation produced by cutting the cervix increased the pain in the already oversensitive nerves to such a degree that for some months Mrs. M., was in a state bordering on insanity from the intensity of the pain, and after some months of treatment, including five hundred dollars' worth of incisions, the patient was left in a much worse condition than before. I saw the case a few days ago. The uterus which was before quite movable, is now more firmly fixed in the abnormal position, and Mrs. M., informs me that her sufferings have been decidedly increased by the treatment, although the uterotomist had the impudence to boast that he had cured her.

Case 2. Mrs. F., a married lady apparently in the enjoyment of perfect health, has not menstruated for some years; never had any children. She was informed that all that was required to bring on menstruation was that the cervical canal should be divided. The operation was performed some sixteen or seventeen times. After some months of suffering the treatment was discontinued, as not the slightest benefit was produced. In this instance the patient fortunately escaped the danger of this reckless tampering with the uterus, the only harm

done being the unnecessary amount of pain that was wantonly inflicted on her.

Case 3. Mrs. Mc., had been under my care for retroversion, caused a short time before by having to exert herself unusually at a menstrual period. This displacement caused considerable menorrhagia, for which I was consulted. As the uterus was rather irritable, she could not wear a pessary. In the meantime a friend who had been treated by one of those apostles of uterotomy, advised her to consult him. The diagnosis was a *tumour in the uterus*—two months' preliminary treatment and then *an operation.* Being a sensible woman she knew that all is not gold that glitters, and the result was that she again came under my care, when the irritability of the uterus was subdued by rest and leeches, she wore a pessary for some four or five months, and for the last twelve months has been perfectly well, menstruation regular and normal, and she can walk as far and as well as ever without an ache or pain, in fact the uterus is restored to its natural position and stays there.

Such a case as this requires no comment, as it plainly shows the amount of ignorance of uterine disease that is required, to enable these uterotomists to firmly believe in their peculiar line of practice. At least this is the most charitable construction to put on such a case, otherwise we must suppose that the treatment recommended was advised more for the benefit of the physician than of the patient. I trust other members of the profession who have met with analogous cases will take the trouble to publish them, for, it is only in this way that we can arrive at a knowledge of the effects of this most irrational mode of treatment. This is the more necessary as we cannot expect to obtain anything like correct accounts from its advocates, for without imputing to them any direct intention to deceive their professional brethren, it is plain that those who take up such irrational ideas, cannot be trusted to make rational observations on medical subjects.

HYPODERMIC INJECTION OF ERGOT OF RYE IN ANEURISM.

By Prof. Van Langenbeck, of Berlin. Translated by C. T. Deane, M. D., San Francisco.

I have translated the following report, thinking it might be interesting to some of your readers. I would state here, that I have used Ergot hypodermically, for uterine hemorrhage (when not caused by a foreign body) frequently with good results. What suggested the idea I do not remember, but I do not claim for it any originality.

At the session of the medical society of Berlin, held on the 17th of February, Prof. V. Langenbeck spoke on this subject. He hoped that the remedy he had brought into notice might be further tested, inasmuch as the growth of an aneurism might possibly thereby be arrested. He based his application of the remedy on the fact that the "Secale Cornutum," as is well known, in childbirth calls forth contractions of the organic muscle-fibres of the uterus. From this fact he deduced the conclusion that it might in a case of aneurism, similarly effect the muscular coat of the artery. The patient, a man of 45 years, with a strong constitution and previously healthy, was attacked in the spring of 1864, with a pain in the right arm, which radiated from the shoulder or the side of the neck. He was treated for rheumatism with sulphur baths. The pain increased so as to deprive him of sleep, the arm growing weaker and weaker. In September, the patient observed a pulsatory swelling on the right side of the neck. In the beginning of October, Dr. V. Langenbeck traced the same to the right fossa supraclavicularus and found an aneurism of the size of a pigeon egg.

The pulsations could be followed from the inside through the fossa triangularis into the jugular, a proof that the whole subclavia, even where the swelling did not reach, was affected. The action of the heart was normal, but weaker than is customary in a strong person. In the aneurism there could plainly be heard a bellows sound in the direction of the anonyme. The pulse in the right radialis was stronger than the left, (which is sometimes the case) only somewhat retarded. The pulsations of the aneurism were strong—the pain very much annoyed the patient. Dr. Langenbeck applied to the aneurismatic sack, a moxa composed of neutral chrom. potassi, and from the beginning of October until December, at intervals of three to four weeks, it was applied four times. The symptoms improved, the pain almost vanished, only now and then the patient observed a slight twitching of the arm, and in the beginning of January he returned to his home. From January, 1865, until the summer of 1868, he was apparently well and pursued his former occupation. The aneurism had become smaller, yet it was there, it pulsated plainly but caused no trouble. During last summer the patient visited Misdroy for the purpose of sea-bathing, since which time his condition has become rapidly worse. The swelling increased, the pulsations became stronger, the pain again made its appearance, the arm became weaker, sleep again deserted him, and so it continued without any change until January, 1869. The doctor now observed the following condition: The aneurism had materially increased in circumference, reaching the size of a

clenched fist. The pulsations were enormously strong, and also perceptible beneath the clavicle, from which might be concluded that the subclavia must have been materially distended. The pulsations might also at times, when the patient had been walking, be observed by the strong rhythemical shakings of the head. The sterno cleido mastoideus and the region of the fossa triangularis were arched forth, the jugulum overspread, the pulse in the right carotid was not observable, and he also failed to get the response in the right *temporalis superficialis*. The patient complained that for the last month he had been unable to sleep on account of violent pains in the right arm; he could not lay on his back, but had to sit up in bed, the body bent to the right; in this position could he sleep and only then at intervals. He was especially annoyed by the increasing weakness of the right hand. Since the preceding summer, he had not been able to write, as he could not hold a pen between the thumb and index finger, the hand was greatly emaciated, as is the case in muscular *atrophie*; the space between the ossa meta carpi had become hollow, especially of the thumb and finger, the movement of the finger exceedingly defective, the flexors lamed, as well as the small muscles of the hand and thumb. The feeling in the region of the ulnaris was feebler, so that here and there, particularly at the fifth finger, *anaesthesie* was perceptible. The last finger joints were swollen, and the patient affirmed that the swelling had commenced in the course of the deterioration of the aneurism.

On the 1st of January, the doctor made the first hypodermic injection of 0.03 grammes, Ex. Sec. Corunt. aquos. This injection as well as those that followed it, were made in the morning between eleven and twelve o'clock, and always under the skin covering the aneurism. The patient slept quietly during the whole of the night following the first injection. The next day and after the succeeding injections, the patient was already able to sleep lying on his back, and the pains in the right arm were much less acute. The aneurism pulsated with less force and had considerably decreased in circumference. From January 6th, to February 17th, (and generally at intervals of three days) there was injected altogether, two grammes of ergotine, in doses of 0.03 to 0.18. The improvement has steadily gone on to this day. The patient who was unable to hold a pen, can now write. The movements of the hand have returned. When the treatment commenced, the patient carried his hand in a sling, but now he carries a cane in his hand. The aneurism however still pulsates perceptibly, but markedly weaker and has materially decreased in circumference; the jugulum has become more superficial and the fossa triangularis between both sterno-mastoideuns has been restored.

Dr. Langenbeck observed no constitutional effects of the ergot. On one occasion he injected 0.18 grammes and the patient complained of glittering before the eyes and giddiness, but the doctor thinks it may have arisen from some other cause.

Dr. Langenbeck has thus far used the watery extract according to Bonjeau: ℞—Ex. Secale Coru. aquos MxL Spir. Vin. Rectif. Glycerine â â $3\frac{\div}{ii}$. There are some other interesting experiments with the hypodermic use of ergot, which I will notice next month, if agreeable.

CORRESPONDENCE.

MRS. WINSLOW'S SOOTHING SYRUP.

Editors Medical Gazette:

Some weeks since I was called to an infant of six months old, who was in a dying condition, apparently from the effects of a narcotic poison. It had taken no medicine except this Soothing Syrup, of which it had taken, within ten hours, two doses of about one teaspoonful each. I had the Syrup from which these doses were given, analyzed by a skillful chemist. There were 10 drachms of Soothing Syrup in the vial and it yielded of morphine and other opium alkaloids, 1 14-100 grains, very nearly one grain to the ounce of Syrup. This result astonished me. The printed directions for administering the medicine are as follows: "For a child under one month old, 6 to 10 drops, three months old, half a teaspoonful, six months old and upwards, one teaspoonful three to four times a day until free from pain. In dysentery repeat the above dose every two hours, until the character of the discharge is changed for the better." Here we have a dose of morphine equal to 10 drops of laudanum, given to a child of three months old every two hours, and double the quantity to a child of six months old.

I have always discountenanced the use of this preparation as I did not know its composition, and supposed it contained some anodyne, but I had no idea of its deadly strength. It is a familiar fact that children are very susceptible to the influence of opium, and four drops of laudanum has been known to kill an infant of nine months. I think it important that this analysis should be published, that the profession, and through it, the public, may be warned of the fearful effects of administering this dangerous and popular nostrum. The quantity used in the community is enormous, doubtless it has killed hundreds of children, and would kill

thousands, were it not that by beginning in very small doses and gradually increasing, a tolerance of the immediate poisonous effects is induced, although the miserable little victims of domestic drugging are reduced to puny and cachectic creatures, that are carried off by the first disease that takes hold of them.

The specimen of Soothing Syrup analyzed, was made by Curtis & Perkins of New York, who are the only manufacturers. I have ascertained that there are about one hundred thousand two-ounce bottles of it sold annually in this city, making two hundred thousand ounces of Mrs. Winslow's Soothing Syrup, containing about one hundred and eighty thousand grains of morphine, which are given annually to the babies of this State. No wonder that one-third of them die before they reach the age of two years! R. M.

BOSTON, Mass., October, 1869.

Editors California Medical Gazette:

I do not know that San Francisco is so overrun with druggists' shops, managed in many cases—with of course numerous exceptions—by incompetent proprietors and clerks as in Boston. If such is the case, however, an immediate remedy for the evil is demanded. Here there are hundreds of these cheap drug stores stocked with articles of inferior quality, which are dispensed in some instances with a degree of carelessness and recklessness perfectly diabolical. In the vast majority of these shops the preparing of prescriptions is made a matter of secondary importance, which of course, when prescriptions do find their way to such shops, as they constantly do, only makes the matter vastly worse. Only a few weeks since, upon two occasions, tincture of opium was dispensed from the same shop for tincture of rhubarb. At another shop in putting up a prescription for a child, tincture of opium was substituted for camphorated tincture of opium, and result—death of the child. I also know that the same mistake was made at another shop not long since, in putting up a plainly written prescription, the mistake nearly causing the death of the child for which it was prepared; prompt professional attendance only preventing a fatal result. That a reform of some kind in the matter of the dispensing of drugs is loudly called for there is no question; just what it shall be is not quite so apparent.

Dr. Solomon D. Townsend, formerly attending surgeon to the Massachusetts General Hospital, and at the time of his death consulting surgeon to the City Hospital, and Dr. Francis C. Ropes, attending surgeon to the City Hospital, have recently died in this city; the former ripe in years and professional attainments and beloved by all who knew him, and the latter younger but promising distinction in his profession.

The medical societies are recommencing their meetings which have suspended during the summer months, and hereafter I shall be able to present some gleanings from their doings, which I hope may not be devoid of interest to your readers.

The last session of our State Legislature established a State Board of Health, and seven gentlemen constituting said Board have been recently appointed by the Governor and Council. As proof that this Board will be an energetic and efficient one, it is only necessary to mention that Dr. Henry I. Bowditch is its chairman, and Dr. George Derby, University lecturer on hygiene, and for some time past State statistician upon sanitary matters, is its secretary.

The special functions of the board are, to use the words of its president, which I copy from an account of the first meeting of the Board, contained in the Boston *Daily Advertiser*:

First—"To take cognizance of everything tending to public health, and of course requires its endeavors to eradicate everything tending to public disease and death.

Second—To diffuse among the people a knowledge of the means of obtaining individual and public health and of preventing disease.

Third—To investigate the effects of the use of intoxicating liquors upon the industry, prosperity, happiness, health and lives of the people, and suggest legislation on any or all of the subjects committed for investigation."

A plan of work consisting of public lectures in different parts of the State by the members of the Board; public meetings for discussions upon hygienic and sanitary matters; the circulation of pamphlets adapted to popular reading; and annual reports to the legislature has been suggested by the chairman of the Board.

That the institution of this Board will be of untold benefit to the people of this commonwealth there can be no doubt. There is no reason why "State Medicine" thus inaugurated here, may not prove as great a boon to the public, as in many of the countries abroad, where it has come to be acknowledged a matter of great importance.

To say the least, the establishment of the Board will not be without its good results, if it should by any suggestions to the legislature, become instrumental in placing upon a proper and *permanent* basis, our State liquor laws, and thus relieve our august legislators in general court assembled, from the necessity and suffering of continuing their sage discussions upon the question of the intoxicating or non-intoxicating properties of lager beer, from the first of January far into the sweltering days of July.

J. B. T.

CALIFORNIA ACADEMY OF SCIENCES:

The California Academy of Sciences held its regular semi-monthly meeting at the rooms on Clay St., on Monday evening, the 4th inst. Messrs. W. H. Collie and Geo. Hobson, were elected members of the Academy.

Dr. Stout donated to the Academy, specimens of a root called by miners wild parsnip, and read the following letter from Lieut. H. L. Carpenter of Ruby Valley, relating to it:

CAMP RUBY, Nevada, May 2d, 1169.

DOCTOR STOUT—*Dear Sir:*

I send you enclosed, a vegetable substance which I think will prove of interest to you. A party of miners were camped in Ruby Valley, and one of them found some roots in a small stream, which he brought to his comrades saying that they were good to eat, and calling them wild carrots. Three of the men partook of them, one only eating a very small piece, the other two eating whole roots. In about half an hour the three men were seized with vomiting and soon after by convulsions and unconsciousness. Two of the unfortunate men died in about one and a half hours after eating—the other recovered.

The root is known in the Valley as the "wild parsnip," and has always been considered as poisonous, having killed a great many cattle and horses; but this is, I believe the first instance of fatal effects on the human race.

The symptoms appeared to be, with the exception of the loss of consciousness, precisely like a case of strychnia poisoning; the whole nervous system being strongly acted upon, the hands clenched, face distorted, and head thrown back almost under the back of the neck as they lay on the ground. After death, the bodies turned black and decomposed very rapidly.

The root grows in marshes and along the edge of streams; it is about the size of the beet and similar in shape. It smells and tastes like a parsnip and has a few green sprouts growing from the top. The piece which I send you, is one of the small branches growing from the lower end.

Yours truly,
LIEUT. CARPENTER, U. S. Army.

Dr. Stout stated that he had prepared a highly concentrated tincture from the root, having the strength of Norwood's Tincture of Veratria Viride. He tried it upon a frog by inserting it under the skin—no effect—then tried it by putting it into the stomach and the frog instantly exhibited symptoms of paralysis, and was rendered perfectly flaccid in one minute. After a short time the frog recovered. There being some uncertainty as to the exact botanical name of this umbellifferous plant, Messrs. Behr and Bloomer were requested to designate the species. For this purpose a specimen of the entire plant, with its seeds, were placed in their hands. Prof. Davidson exhibited two marmot skins (Arctomy's purinosus) and the skull of a wild cat from Chilkaht, Alaska, lat. 59 degrees and 25 minutes. Also some iron ore containing probably as high as 75 per cent of iron and feldspar from same District; also coal and shale.

The following donations were made to the Library: a paper on Hydrofluric Acid by the Author—G. Gore F. R. S.; Catalogue of the Library of Dr. B. F. Shumand of St. Louis, Mo. Prof. Davidson stated in regard to the subject of Indian Mounds discussed at the last meeting, that some years since he observed a mound in vicinity of Saucelito, ten feet high and found about thirty skulls. He concluded that Indians had something to do with the elevation. Prof. Davidson made some very interesting remarks upon the recent total eclipse, which he observed by direction of the government in Alaska. He stated that the most important point he had been able to determine was that the phenomenon called "Bailey's beads," said to have been observed by others, was not noticed in any degree and he had every opportunity to notice it, if it had any existence. It has been explained by the theory of unequal refraction of our atmosphere. He concluded that it had no existence.

At a meeting of the Academy on the 18th ult., eighteen members were present.

Mr. B. Christiansen was elected a member of the Academy.

Mr. Gregory Yale presented the jaws of a shark recently taken in the bay of San Francisco, and stated that he believed the species to be new to the bay. Some discussion followed, going to show that similar specimens had heretofore been obtained.

Mr. Horace Davis presented some fragments of Indian implements and shells from a shell mound near San Rafael. Twelve of these mounds are still to be found there. One is a large oval-shaped mound, 300x75 feet, and twenty feet high. These mounds contain skeletons, flints, circles of stones, etc. The skeletons of the dead are found buried one above the other, showing that the Indians have lived there many years. Mr. Davis found no specimens of art that showed any great skill, and thought that what he had communicated was of little value.

Dr. J. J. Cooper made some remarks showing that the specimens presented by Mr. Davis did possess much value in determining the origin and character of the people who made them. Dr. Cooper said they had not advanced beyond the "stone" age. He said that the Asiatics had visited this coast—north and south; and that the Chinese had discovered Mexico before Columbus. Dr. Cooper said that a large mound exists on the island of San Nicholas, containing many relics of bones and wood, which showed that these Indians had not advanced beyond the "stone" age.

Prof. Davidson continued, confirming these statements.

A very interesting discussion, relative to the Indian tribes of California and the Pacific coast, followed, in which Prof. Behr, Prof. Davidson, Hon. Gregory Yale, Dr. Cooper, Horace Davis, Esq., and others participated.

Mr. Carlton exhibited some specimens of fossil shells from a ridge back of the Martinez range, Contra Costa county.

DEATH FROM RATTLESNAKE BITE.

A young man named Joseph Wagner, living in Charleston, West Virginia, professed to have the power of charming snakes. Last week, having captured a rattlesnake, he was giving some friends an exhibition of this power. After fondling the snake for a time in his arms, he threw it on the ground and switched it until it writhed with rage. He then took the reptile up in his arms again, and saying "Are you mad? Kiss me and make up," he put its head in his mouth. The snake bit his tongue, and he died in about an hour afterward.—*Med. and Surg. Reporter.*

Was the young man mad, or was he an idiot?

PRESERVATION OF DEAD BODIES.

At the meeting of the Imperial Academy of Medicine (June 8th), M. Devergié stated that, at the school of Practical Anatomy, bodies injected with a mixture of three parts of glycerine and one of carbolic acid, had been preserved for several months without giving off any unpleasant odor.

ANILINE violet occurs naturally in the fluorspar of Woelsendorf, as also in the mollusk Aplysia depilaus, where it is contained in a bladder, below its breathing organism. Pliny mentions this mollusk under the name of offa-formis.—*Journ de Pharm. et Chemie.*

California Medical Gazette.

SAN FRANCISCO, NOVEMBER, 1869.

☞ *All Letters and Communications to be addressed to the "Editors California Medical Gazette, care of A. Roman & Co., San Francisco."*

INFANT MORTALITY.

The great mortality that attends our race at the threshold of their existence is a subject that should engage the serious consideration of every man who feels any interest in medical or social science, as well as of every philanthropist.

While in London one-hundred and sixty in every thousand deaths occur in infants under one year of age, in San Francisco it rises to nearly two hundred, and in the city of New York, according to the Report of the Metropolitan Board of Health, "one-fourth to one-half of the whole mortality is to be found among children under one year of age."

These facts are so startling and so fraught with woe to our race and misery to so many households, that no efforts should be spared to search out the causes, and by diffusing intelligence, apply the remedy.

Detailed vital statistics are often unsatisfactory, and always so when applied to nursing children, for the reason that there is no agreement in the nomenclature or classification of their diseases. We are told in the Report of the Health Officer that of the eight hundred and twelve infants under one year of age who died last year in this city, thirteen died of atrophia, ninety-three of marasmus, four from anemia, thirty-three from debility, two of syncope, forty-five from inanition, one-hundred of convulsions, fourteen of asphyxia and suffocation, all of which terms fail to convey an idea of the true cause of death; only symptoms or conditions in which infants died.

We find also the following looseness of terms applied to affections of the alimentary canal:—entiritis, gastro entiritis, gastro malacia, gastritis, inflammation of bowels, diarrhea, dysentery, cholera infantum, etc. Out of such confusion it is useless to attempt a classification of diseases, and the Health Officer did the best, perhaps, that could be done in furnishing an alphabetical list of terms, leaving each reader to draw his own inferences.

Notwithstanding the prevalence of the epidemic of variola during the last year, by which about one-half of all infants who died from contagious diseases perished, the percentage of deaths from that class of diseases, was much less in San Francisco than in New York or London.

The ratio of deaths from diseases of the respiratory organs also is less than in the last mentioned places, so that the great mortality among infants in San Francisco cannot be charged to the influence of climate or inferior hygienic provisions.

By the aid of long experience with disorders of childhood and a thoughtful perusal of that list, the conviction is forced upon us that more than one-half the total deaths of children under one year of age were from causes originating in defective nutrition, either directly or from diseases engendered by food unsuited to the feeble digestion of the new born infant. Making full allowance for the effect of disease and feeble constitutions inherited from vicious and sickly parents, there remains an amount of mortality that cannot be reconciled by any analogies in nature as necessarily incident to human life. No such mortality from natural causes attends the young of any other mammals. The infancy of man was made the most helpless of that of all animals, because to man was given the largest development of reason and intelligence to protect it, but so badly has he perverted both, that so far as his offspring is concerned it might have been better to have left them to the protection of animal instinct.

The evil consequences that flow from the causes of infant mortality are not to be measured by the mortuary list; the seeds of disease are often planted to bear their pernicious fruit in later life, in sickly, feeble minds, and an existence burthensome to the community in which they live.

Great as are the evils that flow from ill ventilated apartments, filthy yards, neglected sinks, and other hot-beds of noxious miasma; the consequences of injudicious feeding exceed in fatality all other causes combined, in those consequences we include all the mischievous efforts to correct the evil. From the very hour of birth the little one is the victim of wrongs; the spoon is brought into requisition, and molasses and other deleterious substances are introduced to ferment, and irritate its delicate organs of digestion; the baby cries with colic and soothing syrups are resorted to, to stifle the natural expression of wrongs endured. The alvine evacuations, if intelligently observed, would reveal the curdled and undigested food that is preparing the little one for acute enteric disease, convulsions, or the slow wasting which finds expression in the terms marasmus, anemia, inanition, etc. It is at this stage that counsel is sought, the nearest druggist is consulted, whose business it is to sell drugs and not to know the laws of health or the nature of disease, and his confidence in the virtues of the former are inversely as his knowledge of the latter, and the little sufferer is made the subject of

farther outrage in the form of medicines that would appall the stoutest stomach. We have seen a mother loaded down with a half-gallon mixture to be administered to her infant, and another bottle of the same size containing a compound of turpentine and oil to be applied externally, when the child only needed rest to its overtasked digestive organs, and the woman estimating the value of the advice by the quantity of medicine that accompanied it, congratulated herself that it cost her nothing.

The vitality of some children is astonishing, the quantities of medicine they will consume before they succumb is somewhat marvelous, the amount of opium given in the various forms in which it is administered such as the "soothing syrups," "carminatives" and "cordials" before the victim sinks from marasmus, staggers belief.* We have known an infant that ought to have been at the breast, plied with tincture of iron for months three times a day to enrich its blood, when it had almost no blood to enrich, and notwithstanding the stomach had become so irritable as to eject everything that was put into it, until the last stage of *inanition* was reached, and the little victim with sunken eyes, extremities cold and pulseless, was fortunately "given up" to die, "medicine could do no more for it" and yet that child recovered with a little breast milk. It is unnecessary to multiply these cases, every intelligent, thoughtful physician has his memory stored with similar ones. What is the remedy? It is in vain to look for legislative redress. It is equally vain to look to the medical profession; it has already passed beyond its own control, the gates have been thrown wide open, every one who wishes can practice medicine and take life with impunity, little lives especially; diplomas are conferred as readily as certificates of death, and the profession is crowded with lazy artizans of every description too ignorant to read intelligently, too indolent to think; how can they be looked to to aid in mitigating the evils it is for their interests to foster. If any think these remarks are too sweeping and severe let him look at the mortuary list in the Report of the Health Officer; see there infants under one year, dead of caries of spine, chlorosis, epilepsy, typhus fever, gastric fever, gastritis, ulceration of stomach and the generally unintelligible nomenclature of diseases.

The medical profession in San Francisco as an organization has no existence, there is no recognized authority to which to appeal, and no test by which the great body of the people can know whom to trust; as a body it is voiceless and dead.

The remedy lies in diffusing intelligence among the mothers. Let a small share of the efforts made in the diffusion of tracts for proselyting to the dogmas of religious faith, be exerted for the diffusion of information on physiology and the laws of infant life, for the salvation and development of their bodies; and who shall estimate the number of souls that would be reared up to be worth saving.

Here is a field for the exercise of the rights of intellectual women that would meet the well wishes of all, a missionary field yet uncultivated, a harvest to be snatched from the reaper *Death.*

We took occasion in our last number to use very severe language concerning a clerical correspondent of the *Occident,* who provoked it by insulting the many good and intelligent physicians in this city, by saying that "the most skillful and popular physician in San Francisco, was a Chinaman." That he should say that he was the most skillful was certainly a gross insult as well as a slander—it may be true for aught we know, that he is the most popular—but that is a reflection upon the intelligence of the community, which we as medical men, are not called upon to resent. The editor of the *Occident,* in a very complimentary notice of our journal, replying to our strictures says that "the remark was of course a fearful blunder, but as it was made as an incidental allusion, by a person who professed no particular knowledge upon the subject, it is respectfully suggested that a general classification of his intellectual and moral status, under a single depreciatory and denunciatory epithet, is rather sweeping, as derived from so small a basis."

Would not our friend of the *Occident* think it something more than a "fearful blunder," should a stranger throw filth over his profession, in order to illustrate a proposition; or would it mitigate the affront, that his friend should say that he "professed no particular knowledge" of the proposition? That he *possesses* no knowledge is evident, but that he professes no particular knowledge of the subject, does not appear. It may seem to him a small basis for our resentment, but speaking for ourselves, we must say that we have a claim to more courtesy from that quarter. The medical profession has always treated the clergy with the greatest generosity, regarding them as laboring in another field for a kindred cause—the welfare of their fellowman—ever holding themselves in readiness to fly to their aid, or, wherever they have pointed the way to

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* See a communication on another page from a distinguished physician in this city, on WINSLOW'S SOOTHING SYRUP, received since these lines were written. In this connection it is well to call attention to the fact furnished in the Health Officer's Report that thirty deaths among Chinamen are ascribed to marasmus, which the Coroner informed me were chargeable to the use of opium. One hundred and six infants under two years are reported to have died of marasmus. Are those parents who thus slowly poison their children any less guilty than though they murdered them instantly by cutting their throats or throwing them into the bay?

the bed of suffering and death, meeting them with our kindly offices, and therefore it is, that when the clergy strike us in the face, we feel the injustice and ingratitude of the blow.

Speaking for the medical profession in San Francisco, we will say that we are more than usually sensitive to disparagement from the clergy, on account of the recent and repeated scandal cast upon us by a certain clergyman of this city, who plays the two parts of buffoon and mountebank, in the character of preacher and doctor. There was a time when young divinity students qualifying for the missionary field, were allowed, after the formality of attending a course of medical lectures, to receive the degree of M. D., in order to increase their usefulness among the heathen to whom they were sent. This honor was conferred gratuitously, and under the injunction that they were not to practice medicine except in the missionary field. But these gentlemen proved sometimes to misapply the benefit that was intended to be conveyed, they presumed to all the privileges and immunities that the title conferred, and brought dishonor upon the institutions that honored them. This practice has long since fallen into disuse, but then "curses like chickens come home to roost" occasionally. We remember well the night when this one made his parting address at the New York Tabernacle, previous to his departure for India. He was a good enough doctor for the people of Bombay it was thought.

He proclaims from the pulpit that he is a medical man, and as such endorses every form of quackery in our midst, and is responsible for much of the mischief that is constantly perpetrated. We intend to strip the lion's skin from this clerical jackass in a future number, and we ask of the generous editor of the *Occident* that he will not apologize for him.

GYNÆCOLOGICAL NOTES.

ENDOSCOPY OF THE UTERUS.

Dr. Panteleoni examines the cavity of the uterus by means of Dr. Cruise's endoscope; first dilating the cervix by sponge tents. The women is placed on her left side during the examination. He says:

"The removal of the sponge, although made with the greatest precaution, produces always some bloody discharge, and as soon as the sponge tent was removed, I introduced, with the greatest ease, inside the cavity of the womb a cylindrical tube No. 30 of the *filiere* of Charriere, and of the length of twenty centimetres; and constructed in such a way as to be perfectly adapted to the usual endoscope. In fact, it differed only from the usual tubes of Desormeaux by its being shorter, and by having suppressed the lateral openings existing in the urethral tubes of Desormeaux. Having in such a way applied the endoscope I could see most clearly the cavity of the womb, and inspect the condition of the internal membrane. A polypus vegetation was easily discovered at the bottom of the cavity and toward the posterior part of the *fundus uteri* in my case. It was of a vivid red color, unequal like a sponge, and of the largeness of a small strawberry. It was striking the difference with the pale yellowish color of the rest of the membrane. I withdrew the endoscope fixing the tube, however, upon the vegetation, and introduced the caustic through the tube itself, being therefore quite sure of the impossibility of touching anything but the vegetation itself, and then, each time I looked in again with the endoscope to certify the effect of the cauterization before removing the tube. I was obliged to return six or seven times to the use of the caustic."

According to the *Gynæcological Journal*, at a late meeting of the Gynæcological Society, Dr. Storer reported a case of *Removal of a large Pediculated Uterine Fibroid by Abdominaal Section.* The tumor was lying perfectly free within the abdominal cavity. The pedicle was little over an inch long—the ovaries healthy—as was the uterus, except simple congestion. A dozen wire ligatures were applied to the stump—on removal of the clamps—hemorrhage ensued from the track of the wires.

"With much reluctance a double ligature of silk was passed, by transfixion; the first time Dr. Storer had resorted to this material for nearly five years." According to the plan of Prof. W. W. Greene, of Portland, the ends of the ligatures were passed downwards through the vaginal roof by a seton needle, and the abdominal wound closed; progressed well until following day, when she suddenly died of embolism. "At the autopsy, made by Dr. Bixby, the pelvic condition was found very satisfactory, as shown by the uterus and ovaries, now exhibited." Dr. Storer also exhibited another tumor removed by him since the last meeting of the Society. The tumor was multilocular adherent, throughout almost its entire circumference and entirely below the brim of the pelvis, so that it was extremely difficult to remove it without rupturing one of the cysts. The patient did well until the fifth day, when she died of latent peritonitis. Dr. Storer had lost patients before of latent peritonitis, when none of the usual symptoms of the disease were present.

At the eighth regular meeting Dr. Storer exhibited a new form of *clamp for the extra-abdominal treatment of the ovarian stump.*

The Secretary presented a communication from Dr. Gerould,—Ohio,—a corresponding member of the Society—upon *Bromide of Iodine as a therapeutic agent in the treatment of uterine diseases.*

Drs. Storer and Warner thought that it often

produced great constitutional irritation, especially when applied within the uterine cavity.

Prof. Metcalfe of New York uses it as a local application to sore throat, especially of a diphtheritic nature.

SPONTANEOUS CURE OF OVARIAN DROPSY.

Dr. McMillan recently reported to the Edinburgh Obstetrical Society the following interesting case. He says that he was consulted by Miss H. 12 years ago, for abdominal swelling which was then increassing and giving her much anxiety. She was at the time 42 years of age. His diagnosis was ovarian dropsy—and prognosis unfavorable "as the case had altogether a bad aspect."

On his return to the city, after ten years absence, he recognized his patient on the street, and noticing her improved appearance inquired of her as to the cause of this change, when she gave a narrative of which the following is an outline:—

She told me that after I left, she continued to grow worse and worse; she went to dispensaries, consulted several doctors in Edinburgh and Leith, and also medical gentlemen from London; all of whom were agreed as to the nature of the disease, but no medicine or treatment which she received was of any avail. In October 1864, however, she was knocked down in the street by runaway horses. Either the wheel or edge of the capsized cart fell right across her body. When taken up she was in a state of insensibility, and remained unconscious for some days. The first thing she noticed on recovering her senses was, that *the large tumor in her stomach was gone*; and she called the attention of her friends to this extraordinary circumstance. Of course it was a source of great satisfaction to her, as well as wonder. Beyond a few severe bruises, and the shock to her nervous system, she received no serious injury. She was confined to her bed for six weeks, during which time she had a severe cough, with a very copious expectoration of purulent looking matter. This gradually ceased, and she recovered, and with *the tumor* entirely gone; she became restored to a condition of *perfect health*, to which she had been a stranger for many long years.

PEKING HOSPITAL.

We are in receipt of the seventh Annual Report of the Peking Hospital in connection with the London Missionary Society, for the year 1868. The hospital is under the care of John Dudgeon, M. D., C. M. The Report, we are told, is not as complete as usual, on account of the Doctor being absent on sick leave for three months.

There were of out-patients, 13,239 treated during the year, and of in-patients, *i. e.*, those whose cases required operation or close attention, 24. Most of the cases were of a chronic nature, and represented the usual variety of diseases.

"The Mongolians who come down from the plateau to Peking, in large numbers in the winter, to pay tribute and to barter, are frequently to be seen at the Dispensary. Like the Coreans, their wants and ailments are numerous. They are a religious and interesting people—very simple in their manners and dress, and their characters seem free from those blemishes which stain the Chinese so deeply. They have broad round heads, and faces with high cheek-bones. They resemble the Chinese only in the obliquity of the opening of the eye and this to a smaller extent."

It is stated that hæmoptysis is frequent among the Chinese, but that it is without any of the serious or speedy results which follow it with us.

Hernia is also stated to be of more frequent occurrence than might be expected, and their inability to treat it is apparent from the following:

"I was invited to see a patient 31 years of age with strangulated hernia of 12 days standing. The parts were in a state of mortification—nothing could be done—he was in *articulo mortis* and died the same evening. The Chinese doctors were utterly powerless. They had wasted the precious time with delusive and useless plasters. They are entirely ignorant of the cause and nature of rupture, hence their ridiculous treatment, occasionally, by acupuncture, as if it contained, or was merely a collection of air. The native name means inspiration, or movement of air."

During our epidemic, many ignorant people supposed that the Chinese physicians had some sovereign remedy for small-pox. The following, we think, will disabuse the most superstitious, as to their possessing any miraculous remedy for the disease:

"The saddest cases of all, arising partly from their inability to cure, are those of the eyes, either from smallpox or neglected inflammation, and of which not a few appear monthly at the Dispensary. A larger number of cases than in former years with glaucoma and amaurosis have been seen, but from their long standing, no benefit was held out to them. It is extremely painful to see such large numbers of blind persons in the streets, and such streets where good eyesight is especially required."

A simple operation for necrosis of the lower jaw, upon a man from the Great Wall, we are told, was looked upon as a marvel by the people of his town.

From the history of a Coroner's inquest held upon the body of a foreigner, who had been hurt in the streets by a cart, and afterwards died, we would judge that the Chinese are rather behind with their medical jurisprudence. The man had received a blow on the head from the shaft of the cart, and at the time of his death, which was about a month after the receipt of the injury, there were large bed sores on his back.

"Three inquests were held in the usual filthy and ridiculous Chinese style, at which contrary and antagonistic conclusions were arrived at. The result of the first washing discovered that the wound on the head was caused by the

horse's hoof, and the sores on the back by the cart. This could not be reconciled with the position which the body must have assumed after the blow. At the second inquest their first decision was reversed, but was found also irreconcilable, and in the final inquest the wound was attributed to a blow from the cart and the bedsores to the prancing of the horse on the fallen man. Absurd! Remonstrance useless! The patient was thereafter interred."

A very interesting case of osteo-sarcomatous tumor of the right ankle occurred in the case of a small footed Chinese woman, aged 35 years, from T'ung Chow. Eight years before, she had sustained a fall; and when she presented herself she was unable to walk. She had been a field laborer, and this tumor, together with the inconvenient small feet, rendered her quite useless. The growth consisted of five lobes arising from the internal ankle. Three of these lobes were large and ulcerating—the largest one was pendant and reached to the ground and was on a level with the sole of the foot, which on the small foot would give a greater size, from the sole being thrown so much forward and the heel elevated. It was a curious case and gave an opportunity of examining the small foot, a matter not easily obtained, and the first I had seen. This curiosity and which was enhanced by the interesting tumor, induced me to invite my medical colleagues of the French and Russian Legations, and the former gentlemen made a series of beautiful drawings. The foot measured 7 inches from heel to toe. Some are less than this, even 3 inches, in which case the heel is in the leg, and either it or astragalus is supported by a heel of wood. The large toe was quite normal, the second, third and fourth, were bent for the most part under the foot; and the fifth, was completely under the foot and not far removed from the ball of the large toe. On the external aspect there was a considerable elevation caused by an abnormal state of the scaphoid bone.

"The instep of the foot alone measured twelve inches, the root or base of the tumor 19½ inches, in circumference; round tumor and instep 21 inches; height of tumor from ulceration 9½ inches. From its size, position, and nature, it was impossible to excise it and leave the normal leg and small foot, which was so much desired and coveted by the patient; amputation, therefore, has never yet been performed."

The most formidable tumor removed during the year, was on a man 74 years of age. The tumor was of a fibrous nature, and commenced on the right lower jaw, involving the whole side of the face and neck.

Those of our readers who have taken an interest in the Society, will be sorry to hear of the death of the Rev. Mr. Burns:

"We have this year to lament the loss of a staunch friend of the hospital and the Chinese—the late Rev. W. C. Burns. During his residence of four years in the capital, he was foremost in every good work with his head, heart, and hands. This hospital and mission was much indebted to him for counsel and assistance, so much so that he almost came to be looked upon as a colleague. He was constant in his exhortations to the patients and others who came to hear, he was ever ready to advance money to charitable and benevolent objects, and he died, much regretted by his own countrymen and the Chinese, at the Port of Newchwang, on the 4th of April.

CORONER'S CASES.

We clip the following from the *British Medical Journal*, and earnestly invite the attention of the Coroner and the profession generally to its important suggestions, more important in their relation to the Coroner's office in this city than to that of any community for which it could have been written, for reasons that must be obvious to any physician who has seen much practice in California:

CORONERS' CASES.

It is a trite remark, that there is much waste of scientific material in medical practice. It is evidently true of all fields of medical work, but it is strikingly, and as it were obtrusively, true of one field of work. We allude to certain medico-legal cases, or, as we may conveniently name them, "coroners' cases." Practitioners are called—some frequently, some rarely—to cases of sudden death, as to the cause of which there is at least enough doubt to render it necessary that a *post mortem* examination should be made, and an inquest held.

In a metropolis like this—and to the metropolis and to towns we for the present confine our observations—there occur yearly large numbers of cases in which *post mortem* examinations have cleared up difficulties of a grave character. But, as matters now stand, these cases do not serve to help other practitioners in future difficulties. Each practitioner acquires, case by case, an experience of increasing value, but the body medical acquires next to nothing from the precious facts which careful legal and medical investigations disclose. Such a waste should cease. It is not only in the interest of medical science that a more methodical plan should be adopted; but it is in the interest of the public itself that facts of so great importance should be utilized. It is high time that we had diffused in the profession a better means and method in making a diagnosis in such cases of emergency as apoplexy, poisoning, drunkenness, and injury occurring under circumstances which render the most skillful often at a loss to tell from what the patient really is suffering. Coroners' cases would, by giving in vast number records of life symptoms, circumstances of seizure, etc., in juxtaposition with well-observed pathological appearances, supply a good basis for clearer views. What we urge is not the publication of single cases of striking interest, but a responsible and methodical statement of all cases with which the coroner has to deal.

It seems to us that there is a plan which would serve this purpose, whilst it would not lead to any interference with the liberty of action of the medical practitioner concerned in particular cases. Our plan presumes the desirability of establishing public mortuaries for the bodies of those found dead whose homes cannot be discovered; for the bodies of those whose friends cannot, with regard to health, retain their dead until the time for burial; and for those whose mode of death seems to the coroner to justify the *prima facie* suspicion of foul play. There would be in readiness instruments and all other facilities for making the *post mortem* examination easily and satisfactorily; and the medical man would not be left to perform the scarcely medical duty of sewing up the body, and to perform the decidedly non-medical duty of washing and dressing it—things which could be done much better by porters. The further suggestion which we have to make is, that there should be *paid* pathologists,

who should be responsible for the complete performance of autopsies, and for their careful record with what could be obtained of the life-history of the case from medical and lay witnesses. As already implied, the position of such officers would not interfere with the action of those who wished to make *post mortem* examinations on cases which in life were under their own care. On the contrary, we hold that it is not a scientific method to separate medical practice from pathology even on the plea that a skilled pathologist would, from frequent practice, do the special work in a more elaborate manner. Granting that a pathologist would do the work better, it is not desirable that the practitioner—in the interest of the public as well as in the interest of his own mental culture—should be freed from the scientific responsibilities which he now has. Centralization is bad, but the centralization of scientific duties is very bad. But, where the practitioner's duties end, those of the paid pathologist should begin. He should not be responsible for the opinions formed as to the cause of death, but for a record of what the *post mortem* examinations disclose, and especially for a thorough examination of the body beyond what was required to detect the fatal lesion. It would be his duty to make periodical statements on the causes of death which occur from violence, poisoning, drunkenness, apoplexy, etc., and to show how the symptoms of these cases resemble and differ. By this means a mass of facts of great scientific and social value would be utilized for the common good. As it is, beyond adding to the experience of individuals, they are almost wasted.

DIOSCOREA VILLOSA.

Dr. C. T. Hart, in a communication on *Dioscorea Villosa* (wild yam), to the St. Louis *Medical and Surgical Journal*, says that chemical experience is daily developing a broader range of action for this drug; that the dioscorea is found to act principally on the mucous surfaces, particularly when there is pain resulting from spasmodic contraction of its muscular fibres; and, in cancer of the stomach, it is an invaluable remedy in "soothing the pain, distress and vomiting." In no disease, probably, is any single remedy more prompt and certain in action than the dioscorea in bilious colic. For the painful tenesmus of dysentery he has found it to give prompt relief, as also in dysmenorrhœa dependent on spasmodic irritation of the mucous membrane of the uterine neck. Dr. Hart thinks the dioscorea may be classed as anodyne and anti-spasmodic.

Dr. Wood,—London,—uses sulpho-carbolate of zinc for injecting in gonorrhea, and in venereal sores, almost to the exclusion of every other remedy.

☞ *Readers of the* California Medical Gazette *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received and acknowledged under "Communications received."*

SURGERY.

IODIDE OF AMMONIUM IN DISEASES OF THE GLANDULAR SYSTEM.

Dr. I. Waring-Curran writes to the *Medical Press and Circular:*

The iodide of ammonium in diseases of the glands I find by experience a much more active therapeutic agent than that of the iodide of potassium, whether internally administered or locally applied. In the following forms of glandular diseases I can testify to its efficacy and curative properties, and have no hesitation in pronouncing it one of the best preparations with which I am acquainted.

Goitre.—There is no part of England wherein I have seen more cases of bronchocele than at Bacup, a cotton manufacturing valley, about twenty miles from Manchester. Sixty per cent. of the female population suffer from goitre in some shape or form. The usual history is, that it commences *"during the pains of the first labor."* I have had ample opportunity of remarking the accuracy of the statement that there was a connection between goitre and the uterine functions, that the gland became enlarged during the menstrual period, and particularly so in old goitres in women about change of life, when the discharge is scanty and the color altered. All the several varieties of bronchocele are to be seen in the valley of Rossendale. One patient is so unfortunate as to possess one which I am confident would weigh fourteen pounds; extends over the clavicles and sternum, upon which latter it rubs, and causes little inconvenience apparently. The enlargement has been steadily increasing for thirty-seven years.

Cases of incipient goitre treated soon after their being first observed with the iodide of ammonium, made good and permanent recoveries. I prescribe the iodide thus:

℞. Ammonii iodidi, gr. xl.
Spiritus chloroformi, ℥ ij.
Aquæ camphoræ ad, ℥ viij.
Cap. ℥ j., ter in die.

At the same time I direct the following cerate to be rubbed into the growth night and morning:

℞. Ammonii iodidi, ℥ ij.
Glycerinæ, ℥ ij.
Adipis benzoat, ℥ jss.

In some few cases I have obtained great benefit by stopping the iodide of ammonium mixture for a few days, and substituting the hypophosphites of lime. Hitherto, I have inwardly given the old standard formula of iodide of potassium, but a more extensive field in the treatment of the complaint convinces me of the superiority of the drug I advocate.

Tabes Mesenterica.—The local application of the iodide of ammonium ointment over the abdomen, and the internal administration of the same drug—the age of the patient guiding the dose to be exhibited—surpass any form of treatment previously had recourse to. Of course the convalescence is slow, and cod liver oil or glycerine, pancreatine and suet and milk must be given; but these I include more among the articles of diet than the medicines of the physician. A steady perseverance with these measures effects much good. The iodide of ammonium appears to reduce the size of the enlarged glands whose functions are impeded, and to permit the process of assimilation to go on its natural way.

Strumous Enlargement of the Lymphatics, wherever situated, if treated before pus has actually formed on

the areolar tissue covering the part disorganized, will, as a rule, yield to the iodide of ammonium, combined with a generous diet and change of air. I have before me in my case-book, the history of a girl, aged eleven years, who had long suffered from strumous enlargement of the cervical glands, the sequelæ of scarlet fever. She had taken syrup of the iodide of iron, Parrish's "chemical food," iodide of potassium, quinine, and cod-liver oil, but without effect. As a last resource, and it was one of the first cases wherein I prescribed it, I directed her to take three-grain doses of the iodide of ammonium twice a day, and to apply the cerate containing the same preparation. I had the satisfaction of observing day after day the well-marked gradual dimunition of the glands, and the speedy restoration to health. The relatives informed me afterwards that their patience was so exhausted with the girl failing to improve, that they were in the act of calling in further advice. Had such been done, and the iodide of ammonium prescribed, the consequences would have been unpleasant in the extreme. And how often is it that members of our profession obtain a notoriety through similar occurrences, while in one or two instances I know they had not the honesty to give credit where it was actually due and well won, but retained for themselves a success to which they were far from entitled.

Simple Strumous Adenitis gives way more rapidly and with better results under the iodide of ammonium than any other treatment.

Sympathetic Bubo has, in four cases which I have specially treated with the medicine advocated, terminated so satisfactorily that I cannot refrain from recording the circumstance.

Enlargement of the Spleen after Ague.—I had an opportunity last August of testing the therapeutic effect of the ammonium in some cases of enlarged spleen, in a most marshy district in South Lincolnshire. Although the benefit was not permanent in any of the cases—as I believe it was not persevered in for a sufficient length of time—yet, during the period the drug was being administered, the more immediate symptoms appeared to yield to it.

Chronic Hepatic Enlargement has in several instances been recorded in my case-book, where blue pill, podophyllin, taraxacum, and nitro-muriatic acid have proved inert, turned out as cured. I can strongly recommend the drug in this disease, but I invariably blister the hepatic region first, and then dress the blistered surface with the iodide of ammonium cerate.

Tubercular Sarcocele was treated in three instances by the iodide of ammonium. In two of the cases there was a syphilitic history, and, as the patients were pressing for a speedy rather than an effectual recovery, I combined four drachms of blue ointment with the iodide of ammonium cerate, with the best effects subsequently; so that I am unable to give all the credit to the iodide of ammonium—a drug which my experience teaches only requires to be fairly experimented with in order to be more generally employed in diseases of the glandular system.

Intestinal Obstruction, produced by a rent in the great omentum, through which a portion of the bowel slipped, caused by the fright of a dog.

Annie Sabin, twelve years of age, enjoying good health, was sent by her mother to carry her brother's dinner a short distance from their residence. In order to do so it was necessary that she should pass the house of a man who kept a ferocious dog, which was the terror of the village children. The child had passed the house when the dog ran out. She was very much frightened, and flew from the fierce animal a considerable distance, the dog following, but not succeeding in biting her or tearing her clothes. When in the act of running she felt a violent pain in the belly, and when the dog ceased pursuing her, trembled very much, vomited, and had her bowels relieved twice in rapid succession. This is an outline of the history obtained from the child's father, who came to fetch me.

Upon visiting my patient I found her lying on a sofa, suffering great pain, referred to the epigastrium, accompanied by constant vomiting and by depression. Upon careful examination, I could discover no hernia, nor other abnormal appearance. Accordingly, I directed warm fomentations to be applied, and to be frequently renewed, and prescribed an ordinary mixture to allay the sickness or control the vomiting.

August 5th.—The vomiting continues; the child suffers violent pain; the pulse, small and regular, is 132; and there has been no passage through the bowels since immediately after the fright. Directed that an aperient enema should be thrown up at once, and repeated if necessary in two hours.

Evening visit.—No fæcal matter has come away with the enemata; the pain is not so constant, more of a colicky character; the vomiting, which continues, and is produced by the slightest movement or change in position, is of a greenish color and watery character. There is great tenderness, the seat and extent of which is mapped by a circle with a radius of an inch and a quarter surrounding the umbilicus. Ordered the application of three leeches over the site of pain, and directed perseverance with the enemata.

6th.—There is no improvement, and the general symptoms are the same as upon yesterday. I suggest to the parents the advisability of operation, whilst I explain the hazardous nature of such a procedure; but they refuse consent to such a resource, even as a *dernier ressort.*

7th.—The vomiting has become stecoraceous, assuming a yellowish color, with a most fœtid odor; the pain is severe, and the seat of tenderness more extended. During a paroxysm of pain, the recti muscles stand out in rigid outline, but I am unable to detect any prominent portion of the bowel that might be constricted. I prescribe nutritive enemata of beef-tea, port-wine, and cream, with ten drops of tincture of opium in each enema, and paint the belly with extract of belladonna rubbed down in glycerine.

8th.—There is great feebleness, the pulse running at 140. The belladonna locally applied affords relief, in addition to which I direct a suppository, containing half a grain of opium, to be passed up the rectum twice a day.

9th, 10th, 11th, and 12th.—Patient continues much in the same condition, and is kept alive by enemata.

13th.—The pain is less severe, but the tenderness more diffused. The fœtor from the vomiting is such that the people can scarcely remain in the house. There is hiccough, the face is pinched, and the pulse is scarcely to be felt. However in this condition she lived, the suffering alleviated by opiate suppositories and the local application of belladonna, and strength sustained by the most nutritious of enemata until the 20th, when dissolution came to the release of the patient, and the relief of all about her.

Autopsy.—Thirty-six hours after death I made a *post-mortem* examination. Upon opening the abdomen, a

quantity of fluid escaped. What forced itself upon us was a rent in the great omentum behind the umbilicus, with a good sized knuckle of intestine protruding, which was in a gangrenous condition. The opening was circular, and bound the intestine like a bony ring, but such a stricture as operation would have proved most successful in relieving, and, most probably in permanently curing; however this was only to be detected after death. Nevertheless, the operation would have been performed by me had the parents given consent. There was also general peritonitis.—*Med. Press and Circular.*

The British and Foreign *Medico-Chirurgical Review* of July, in concluding a review of *Recent Works on Syphilis*—Lancereaux, Hill, Barton, and Cullerier—uses the following language:

"Lastly, we may ask, is there any rule to guide us in the treatment of syphilis by specifics or otherwise? In any given case can we say with certainty whether mercury should be used or iodide of potassium, or whether the case will do equally well without either of these remedies? To this we must answer—there is no absolute rule of this kind. There are, indeed, certain cases in which most surgeons prescribe mercury, and there are certain other cases in which most surgeons prescribe iodide of potassium, but, on the other hand, there are not wanting practitioners of experience and repute who tell us that all the forms of syphilis and its sequelæ will get perfectly well without any specific treatment at all. If there are any cases in which it is generally held that mercury is necessary, they are iritis and infantile syphilis, and yet we are now told that these cases do just as well without the specific as with it; while iodide of potassium, which has always been used for the less acute symptoms, is now thrown into the shade by fresh air and sea bathing! How far these views can be sustained, it must be left to experience to decide, but at present it appears to us highly unwise to lay aside altogether the use of mercury. In cases of syphilitic retinitis we have the clearest proof of its value, and we should be hardly justified in withholding it in a case of this kind. And, if the specific treatment produces such marked and beneficial results where we have the opportunity of observing its effect closely, may we not conclude that its influence is similar in other cases where we are unable to watch the affected part with equal accuracy? Experience may indeed show that mercury is not necessary even in iritis and retinitis, but at present a surgeon would seem to be almost as much bound to give it in these cases as a physician would be to give quinine in an attack of ague. The organ which is affected is one of great delicacy, and of the utmost importance to the patient; mercury is nearer a specific remedy than any other we possess; and it cannot be said that any serious evils are likely to follow its careful and moderate use. Thus, though we may say that there is no absolute rule to guide us in the administration of specifics, yet there are various cases in which it would seem that the surgeon is hardly justified in withholding mercury, and there are others in which pretty nearly the same thing may be said of iodide of potassium. In this opinion we are confirmed by observing the authors, whose works we have been noticing, all agree in recommending the cautious and temperate use of specific remedies."—*Western Journ. of Med.*

INTERSTITIAL INJECTION OF CAUSTIC SUBSTANCES.

The *Gazette des Hopitaux* of July 24 contains an account of the trials which M. Richet has been making during this last year of what he calls "interstitial injection of caustic substances." The caustic employed is the chloride of zinc, but instead of using it in the solid form, M. Richet employs it after it has become liquefied by exposure to the air. Being very hygrometric, it is soon converted into a liquid of a syrupy consistence. The form of tumor which has been most frequently experimented upon is the sebaceous cyst of the scalp, which the French call *loune*. It is possessed of little vitality and power of reaction, and it suffices to inject into its substance, by means of a Pravaz syringe, from one to four or five drops of the liquified chloride. When the *loupe* is a true lipoma, consisting of nothing but fatty tissue, a few days after the injection its contents may be pressed out by the small aperture in the skin which is left by the little superficial eschar produced at the point of puncture. It has frequently happened that a single drop of the caustic thus injected has sufficed for the removal in this way of tumors of considerable size. In a case in which the *loupe* was formed by the transformation of some blood which had been effused as a consequence of a fall, enucleation could not be practiced after the injection, and the knife had to be employed. The tumor, however, consisted of several firm semi-transparent, fibrous looking layers, in nowise resembling a lipoma; and this is the only instance of failure in twelve months, during which M. Richet has so treated a considerable number of *loupes*.

A week or two since M. Richet tried this injection on an enormous goitre, making several punctures along the median line. There resulted mortification of the skin over an extent of about three centimetres, as also sharp inflammation with induration, and perhaps more or less gangrene of the median lobe of the thyroid gland. It is remarkable that the two lateral lobes diminished rapidly, and became more supple during this inflammation of the median lobe. The injections have been too recently made to allow of the eventful result yet being determined; but it will be a great boon if this mode of cauterizing proves efficacious, so that it may be substituted in the treatment of bronchocele for the *cauterization par fleches* which is employed in Paris, and has in several cases been followed by fatal hemorrhage. —*Med. Times and Gazette*, August 14, 1869.

REMARKABLE CASE OF A FOREIGN BODY IN THE BLADDER, AND ITS REMOVAL BY PERINEAL SECTION.

Dr. A. Pamard, chief surgeon of Hotel-Dieu, of Avignon, in the *Bulletin General de Therapeutique Medicale et Chirurgicale*, gives the following remarkable case:

A man 48 years of age presenting the physical appearance of a man addicted to masturbation, was admitted into the hospital. The man said he had introduced into the urethra a watch-spring. An examination showed his urethra much dilated so that it admitted easily the point of the little finger. A large sound was introduced, and encountered at the membranous portion of the urethra, beneath the arch of the pubis, a foreign body. Chloroform was given the patient, and he was placed in the position for lithotomy. Guided by the point of the sound, an incision was made in the median line of the perineum, four centimetres long, which was afterwards enlarged in a grooved direction. With a pair of forceps the watch spring was seized and removed; it was twenty centimetres long, one millimetre and a quarter broad, and a tenth of a millimetre thick, and doubled upon itself with the "bright" or middle portion occupying the neck of the bladder, and the two ends projecting into the urethra. This posi-

tion and shape of the spring was explained by the man, who, in order to excite erections and pleasurable sensations no longer obtainable by titillation, was accustomed to push foreign bodies into the urethra, and to remove them used the watch spring bent into a loop. He put in the urethra one day a "clove of garlic," and while endeavoring to fish it out the spring slipped from his fingers and beyond his reach.

The surgeon, the same day, when he had learned from the patient that the clove of garlic was in the bladder, a fact not communicated by him until the watch spring had been removed and he had recovered from the effects of the chloroform, enlarged the incision, without, however, cutting into either the prostate or the neck of the bladder. The capacious urethra enabled the surgeon to introduce his finger easily into the bladder and feel the "clove of garlic," which was fished out with a curette, and measured twenty-five millimetres long and fifteen millimetres in its greatest breadth.

Some inflammatory action involved the perineum and scrotum, but in a few days it disappeared, and the patient made a happy recovery.—*Med. and Surg. Reporter.*

NÆVUS CURED BY INJECTION OF CARBOLIC ACID.

Mr. Potter exhibited to his class a child named Margaret B., aged 10 months, who had been received into hospital about six weeks previously, for the treatment of a large nævus, situated on the lower part of the forehead, immediately above the nose. It was venous in character, and when first seen was circular in form and as large as half-a-crown, projecting forwards considerably. He resolved to attempt its solidification and cure by the injection of carbolic acid, and accordingly two minims of pure acid were introduced into the nævus by means of a hypodermic syringe. Such inflammation as followed having been allowed to subside, the operation was repeated, seven times in all, an interval of several days being permitted between each injection. No untoward consequences took place; the skin was not injured; and now, after the seventh operation, the mass had become solidified, and would in due time be absorbed.—*Medical Press and Circular.*

PRACTICE OF MEDICINE.

APHASIA.

Sir:—I venture to send you the few following ideas which have lately occurred to me regarding the subject of aphasia, together with some short remarks in reference to the *localization* of speech.

After careful consideration, I have come to the conclusion that aphasia is a disease very closely allied to locomotor ataxy, and that the want of speech in the former results from a want in the power of co-ordination, just as much as does the uncertain gait in the latter; or, as Dr. Clifford Allbutt would express it, the defective speech in aphasia and the extravagant gait in locomotor ataxy both result from a loss of consciousness of the relations in space between the body and the medium. In aphasia, the patient is able to make a noise with his throat and produce both high and low notes, but he cannot utter words to express what his mind wishes. He makes an attempt to speak, but finds from some cause or other he is unable to do so. The tongue is not in the slightest degree paralyzed, but only like a boat which has been deprived of its rudder, incapable of being steered. So in locomotor ataxy, the legs are not paralyzed, but only incapable of being moved in the direction the person wishes. Dr. Brown-Séquard relates a case of aphasia in which the patient was unable to express "yes" by lifting up one finger, and "no" by two, although told to do so; or, in other words, where the patient evinced clear signs of being afflicted with a kind of locomotor ataxy.

Speech appears to me to result from the mind connecting certain things with certain sounds produced by certain movements of the mouth and tongue. Those born deaf are incapable of speech, owing to their want of appreciation of sound; but they can express their thoughts by writing and by certain movements of the fingers and hands. They have the capability of speech, but, from want of the faculty of hearing, it cannot be called into action. In these cases the mind is perfect in every particular, consequently I believe the capability for speech is perfect also. Again, those who are born blind, or become so from some accidental cause shortly after birth, are longer, I believe, in learning to speak, owing to their being unable to perceive what movements of the mouth produce the several sounds. Speech, in my opinion, is simply reason directing the motor nerves of the tongue. We see in the child the mind first coming into play, and then speech following; without the first existence of the mind, speech is impossible. Speech cannot come before the mind exists to appreciate different sounds and surrounding objects, so that in those cases where there is a decided deficiency of brain, or helpless idiotcy, speech is absent. If we attempt to localize speech, then we ought to assign some spot for noise also, because speech consists simply of various modifications of sounds. The mouth acts in speech as does the larynx in singing. The mouth makes, by instruction, various embouchures, through which air is forced and various sounds produced. The mouth may be formed for the letter, but no speech is produced till there is an ingress or egress of the breath. In some cases there appears to be some difficulty in directing the movements of the lips and tongue, and consequently an incorrect pronunciation is given to the words spoken. We find this more especially in French words spelt with the "ien," and in Scotch and German ones containing the "ch." If this faulty pronunciation arose from other than a simple want of proper education, some deficiency in the spot assigned to speech ought to be made out. For my own part, I should say that the disease which we term aphasia resulted from a want in the co-ordinating power of the brain, and that the *post mortem* changes were likely to be found, as in locomotor ataxy, in the posterior columns of the spinal cord.

I am, etc., F. P. Atkinson, M. D., etc.

—*British Med. Journal.*

TREATMENT OF RHEUMATIC FEVER BY PERCHLORIDE OF IRON.

Sir:—In rheumatic fever, the blood is in a highly fibrinous condition; there is also a tendency to the deposit of fibrin, and to the formation of clots in the blood. The perchloride of iron is known to favor the coagulation of the blood. These are, I believe, well-established facts.

Dr. Russell Reynolds in his paper, an extract of which is given in the *Journal*, informs us that he has treated eight cases of rheumatic fever with the perchloride of iron, and that of these one died with cerebral symptoms, and another with intercurrent pneumonia.

I well remember a case of tonsilitis which I treated with

the perchloride of iron; the patient died with "cerebral symptoms"—such, indeed, as distinctly pointed to the formation of a clot, which must have obstructed the flow of blood to the brain. May I ask whether Dr. Reynold's case was at all similar to this, and also whether, in the other case, it is possible that embolism of some of the pulmonary vessels may have given rise to the "intercurrent pneumonia"?

I have treated many cases of rheumatic fever with the iodide of potassium and large doses of the bicarbonate, and have certainly met with success equal to that reported by Dr. Reynolds, nor have I ever had a case which terminated fatally. I cannot help believing that the mode of treatment warded off those "symptoms and intercurrent diseases" which in Dr. Reynolds' cases proved so injurious.

Should further experience prove the perchloride of iron to be a remedy in rheumatic fever, my fear is that it will be a most dangerous one; whilst on the other hand, in the alkaline treatment, we have at least the means of lessening the tendency to the separation of fibrin from the blood, and of preventing those deposits upon the valves of the heart which we so much dread as the consequence of rheumatic fever.

In the case of tonsolitis to which I have referred, I do not consider that the use of perchloride of iron was the sole cause of embolism, but that it would favor, rather than prevent, such a complication.

I am, etc.,

H. Ernest Trestrail, L. R. C. P. Edin.

—*British Med. Journal.*

PATHOLOGY.

PATHOLOGY OF TUBERCULOSIS.

Dr. Sanderson said, in a paper read before the British Medical Association, Virchow has shown that the morbid growths which occur in the organs of persons affected with tuberculous diseases are not characterized by the form or size of the corpuscles, so much as by the interstitial reticulum by which they are held together, and by the relation of the morbid growth to the connective tissue and blood vessels of the affected part; and, further, that there is nothing in the anatomical structure of a tuberculous growth which is exclusively peculiar to itself: for tubercle, considered anatomically, is but one member of a numerous class of morbid products (called by him lymphomas), in all of which the same corpuscles and the same stroma are met with. In short, there are no peculiarities by which any given specimen of tuberculous material can be determined to be tuberculous. Its character depends, not on what it is either chemically or structurally, but on the changes it undergoes, and its relation to existing structures. Phthisis cannot at present be better defined anatomically than by saying that it consists in lobular consolidation of one or both lungs, followed by gradual disintegration of the consolidated parts. The most important question in the pathological anatomy of the disease is that of the nature of the consolidation. On this point, the author held that it is not possible to distinguish the induration of phthisis from that of chronic lobular pneumonia, so far as relates to the anatomical characters of the indurative process. Again, the same characters are met with in the lobular pneumonia which results from inoculation, as in phthisis. In either case, the induration is due partly to the thickening of the framework of the organ by the interstitial growth of adenoid tissue, partly to the choking up of the alveoli with catarrhal products. With reference to the etiology of phthisis, the author considered that the origin of tuberculous disease may generally be traced to one of two agencies; viz., to a constitutional liability or predisposition, of the nature of which we are at present entirely ignorant; or to the influence of prolonged local irritation. With reference to pulmonary consumption, he held that chronic bronchitis, chronic catarrhal pneumonia, and phthisis, cannot be separated from each other by definite lines; and that many cases of phthisis originated from bronchial catarrh. In accounting for the development and widely spread distribution of tuberculous disease in the body, great stress is laid on infection—*i. e.*, the fact that any chronic induration of an organ, if it last long enough unresolved, has a tendency to produce similar indurations elsewhere, not only in adjacent, but in distant organs. The way in which this happens we learn by the study of artificial tubercolosis. Its reality is exemplified in almost every case of phthisis. In conclusion, Dr. Sanderson expressed the opinion that the doctrine of specificity had exercised a sinister influence on the treatment of phthisis and the management of phthisical patients; for it had led men to forget that consumption is influenced by the ordinary causes of inflammation, not only in its origin, but in each step of its progress; and that one most important aim in treatment ought to counteract this influence. For this reason, he considered that the treatment of consumptive persons in hospitals for long periods was a great misapplication of the resources of philanthropy. These resources can only be rendered fully available for the purposes for which they are intended by a complete reversal of the present plan of administration. In the first place, no patient should be kept in hospital on the mere ground of his being consumptive, irrespective of his constitutional state; and, secondly, much greater facilities ought to be given to the poor than exist at present for their immediate admission into hospital whenever suffering from acute pulmonary disease, whether primary, or supervening in the course of chronic phthisis.—*Med. and Surg. Reporter.*

PATHOLOGICAL ANATOMY OF TRAUMATIC DISEASES.

Professor Waldeyer lays a good deal of stress upon the occurrence of plebitis after injuries. He says the three coats of the veins are so intimately connected with each other, or pass over into one another so imperceptibly, that when inflammation attacks the outer layer of a vein which lies in a torn, bruised or injured part, it rapidly progresses from without inwards, and goes through the stage of periphlebitis, to that of mesophlebitis, and from there to endophlebitis. Then the products of inflammation, viz., fibrin, serum, pus, etc., may be poured out from the inner surface of the inflamed vein and thus carried into the general circulation. Or smaller or larger fibrinous coagulations in the veins may be formed into emboli, which are very apt to be carried to the lungs, and deposited in the lower lobes, on account of the greater calibre of the lower branches of the pulmonary artery.

Purulent softening of thrombi may take place, followed by the metastatic deposition of pus globules in various parts. Ichorrhæmia and septicæmia may be superinduced. These consequences may even follow upon large bed sores, as well as other injuries of the gluteal and large muscles of the upper and lower portions of the thighs, and of the shoulders.—*Vierteljahrschrift fur die praktische Heilkunde.—Med. Gazette, N.Y.*

GYNÆCOLOGY.

CHLORATE OF POTASH IN ABORTION AND DISEASES OF THE PLACENTA.

Dr. Cuthbert, of the Edinburgh Obstetrical Society, reported a case in which five miscarriages had taken place out of six pregnancies; the placentas were diseased in four. The patient took seven and a half ounces of chlorate of potash and kept the recumbent position for seven months, and then was delivered of a fine healthy child. Dr. Cochrane thought there were many cases of a similar nature, which would do quite as well, if the patient were kept on her back, without taking the chlorate.

Dr. Menzies had a patient who had previously aborted five times, viz., at the fifth, sixth, seventh, and eighth months, the placenta being diseased; and then she went the full term of nine months. He attributed the final success to the chlorate. Dr. Murray had a case in which the woman had aborted five or six times. She was put on the chlorate, her health improved, and she was delivered of a living child in the eighth month. He believed the chlorate was the successful agent.

Dr. Bruce had seen many cases in which it seemed to have a good effect; but his faith was not quite as strong as it had been. Simpson had used the chlorate in a great number of cases; in some it failed, but all remedies fail at times. He had seen it succeed in many cases where rest had not been combined with it. To succeed it must be given in large doses, say ten to twenty grains, three times a day; and its use should not be intermitted for any cause. He gave it on account of the disease of the placenta, but he believed that it also arterialized the blood. He had been told repeatedly that the movements of the child became stronger after each dose. He had cases in which long successions of abortions had occurred, and several living children had been born, after taking the chlorate.

Dr. Keiller could recollect many cases which satisfactorily proved the beneficial effects of the chlorate. He had cases in which a number of miscarriages and still-born children had occurred, in which he put the patient on the chlorate before pregnancy took place, and continued it during the whole period, with success. He always made his patients be very careful at the normal menstrual times.

Dr. Inglis thought that the permanent effect of the chlorate was wonderful. The mother's health improved each time.

Dr. Sidey thought it was most useful in cases where there was a syphilitic taint; and that the bromide of potash did equally well in some cases. The iodide should be still more useful.

DISEASE OF THE PLACENTA.

One of the most common affections is increased growth of the connective disease, and yellow contractile issue followed by contractions of it, such as occurs in the cellular tissue after burns. These contractions may occur in spots, or be spread over the whole placenta, forming partial or general indurations. At the same time, the more the newly formed connective disease grows, the more the real parenchyma of the placenta will disappear, in consequence of pressure and obliteration of the vessels. Hence the subsequent diminution in the size of the placenta arises as much from the loss of substance of the normal tissues, as from the persistent contractions of the new formed substance.—*Monatschrift fur Geburtskunde.*

Does chlorate of potash cure this form of placenta disease? —*Medical Gazette, W. T.* J. C. P.

MISCELLANEOUS.

STATISTICS OF PARIS.

In a paper read before the French Academy of Medicine, by M. Gustave Lagneau, we find the following curious remarks concerning the population of Paris. That of the department of the Seine increases in a ratio nine times larger than that of France, a circumstance naturally owing, not to the difference between the number of births and that of deaths, but to the excess of immigration over emigration. About one-third of the children born in the department of the Seine are sent out to nurse in the others; only one-third of these infants ever return home. From the ages of ten to fifteen for boys, and fifteen to twenty for girls, an immigration towards Paris sets in, which seems to attain its maximum within the ages of twenty-five to thirty. It is so considerable as to embrace nearly two thirds of the population of the department of the Seine, only one-third of which is really indigenous. In consequence of this double current of emigration of infants and immigration of adults, the Seine differs from all the other departments of France in its having a smaller population of infants; a greater one of grown-up persons; a smaller one of married couples; and consequently a larger one of bachelors and spinisters. And now we come to a point at which the author of the paper wanders into the Darwinian system. This constant immigration, he contends—of generally intelligent persons, capable of contributing to the constant advancement of commerce, manufactures, the arts and sciences, of which Paris is the principle centre—seems to explain why since the twelfth century, according to Dr. Broca's observations, the capacity of the skull and the breadth of the forehead have materially increased. To this view of the case it may be objected, that since two-thirds of the skulls one might meet with in Paris are those of foreigners, there are two chances to one against the validity of Dr. Broca's conclusions. The mortality of children under five years of age amounts to one third in the rest of France; in the department of the Seine it is more than one-half. Again, in this department, mortality generally is one-third greater than elsewhere in France; at twenty, the survivors are only two-fifths of the number born; at forty, less than one-third; and at sixty, less than one-sixth. *Galignani.* —*Medical Press and Circular.*

DEATHS BY POISON.

In the five years 1863-7, the number of persons who met with violent deaths by poison in England and Wales was 2,097. In 1,620 cases the description of poison is recorded thus: By arsenic, 83; mercury, 58; opium, 114; morphia, 32; laudanum and syrup of poppies, 436; strychnia, 41; prussic acid and cyanide of potassium, 151; essential oil of almonds, 31; oxalic acid, 66; sulphuric acid, 53; nitric acid, 16; muriatic acid, 5; carbolic acid, 5; salts of lead, 242; improper medicine, 17; overdose of medicine, 52; Godfrey's cordial, 56; improper food, 33; aconite, 6; belladonna, 6; alcohol, 35; ammonia, 8: hartshorn, 3; chlorodyne, 4; vermin killer, 20; turpentine, 3; phosphorus, 15; sulphate of copper, 3; colchicum, 3; disinfecting fluid, 3; nitrate of potash, 3; chloride of zinc, 8; spirits of salt, 3; cantharides, 2; fungi, 6; mussels, 8.—*Brit. Med. Journal.*

DRAGGENDORF AND KAUZMAN, in their experiments with morphia in toxical doses, could not demonstrate its presence in the stomach after seventy-two hours, but found it yet after that period in the intestines. This was not the case where the drug was injected subcutaneously. In this, as also in the introduction through the natural channels, the blood always contains considerable quantities of the poison. In one case, already, twenty-five minutes after introduction of the poison. In the urine, it could be detected two hours after administration, and yet eighty-five hours after the same. The liver showed considerable quantities of the same twenty-five minutes after introduction, if this was not done done subcutaneously, while its separation from the liver in a pure state proved very difficult. The brain was uniformly free from morphia, which was not affected by the usual process of decay in cadavers.—*Vierteljahrbr f. Pract. Pharmacie.*

DR. TAVIGNOT employed phosphorized oil successfully in six cases of cataract. He dissolves in 150 gr. of oil of almonds 0.50 gr. of phosphorus, at 80° C. He uses it internally, as also for an eye-wash. It being decomposed by contact with air, he employs it in gelatine capsules, of which one forms a dose or a wash for both eyes. Coagulated albumen did not regain its transparency after digestion in the oil for two months. The action of the phosphorus in the eye seems to consist, then, in the formation of a new crystalline substance, capable of replacing the old one.

MUNIFICENT ENDOWMENT OF A SCHOOL FOR THE STUDY OF PRACTICAL CHEMISTRY.

Mr. James Young, the late proprietor of the extensive works at Bathgate, near Glasgow, and manufacturer of paraffin and paraffin oils, whose name, in fact, is intimately associated with this manufacture as the discoverer of the process by which these valuable products have for many years been produced from certain varieties of coal, is stated to have presented the sum of £10,000 to the Andersonian Institution, Glasgow, for the endowment of a school to be devoted to the study of practical chemistry.

M. L. CAILLETED demonstrated by numerous experiments that pressure retards all chemical decompositions in proportion to its degree. A plate of zinc, lost under ordinary atmospheric pressure, immersed into muriatic acid 10.0 parts; under a pressure of sixty atmospheres, 4.7 parts, and, at one hundred and twenty atmospheres, 0.1 parts in the same period of time. The boiling point of all liquids is affected similarly, and CAILLETED concludes that all chemical processes are in immediate dependence upon the surrounding mechanical circumstances.—*Journ. Pharm. et Chimie.*

IT is stated that Dr. Goujon has succeeded in producing osseous growths by transplanting the medullary matter of bones. Marrow from the femur of a rabbit was introduced under the skin of the animal and also into an incision in the muscular tissue; and after some time bony substance was found at the points of inoculation. Similar experiments were performed on fowls with the same results. It is hence assumed that the medullary substance acts in the regeneration of bone in the same way as the periosteum, and may be engrafted like the latter.—*N. Y. Medical Gazette.*

TREATMENT OF ANEURISM BY IODIDE OF POTASSIUM.

Dr. G. W. Balfour, Physician to the Edinburgh Royal Infirmary, reports, in the *Edinburgh Medical Journal* for July, eleven cases of aneurism treated by iodide of potassium. In all cases, where the treatment has been continued for a sufficient time, there has been not only relief of the symptoms, but a positive improvement; and Dr. Balfour thinks that facts tend to show that iodide of potassium also acts remedially and prophylactically in the "aneurismal diathesis."

PROF. WITTSTEIN received from Mr. LIGBOLD, in St. Iago de Chile, a substance named polcura, a mineral, found 12,000 or 14,000 feet above the level of the sea, in enormous quantities, and used there for tanning. It is a dirty, yellow, loose, crystalline powder, of an alum-like taste. Its soluble portion amounting to 24 per cent. consists principally of sulphuric acid, alum, lime, magnesia, soda, potash, iron, chlorine and salicic acid, which composition renders it practical for tanning small hides.—*Vierteljahrsh f. Pharmacie.*

PROF. A. ANDOUARD, in Nantes, analyzed the water of a lately discovered ferruginous spring from the Canton Beauprèau, which he finds the richest in France. It flows at the rate of three litres per minute. Its taste is pleasant, it being saturated with carbonic acid which does not pass off spontaneously. It contains in 1000 grammes 0.0384 gr. of protoxide of iron, as also a trace of manganese and arsenic.

A NEW STYPTIC COLLODION.—M. Carlo Paresi gives, in the *Gazette de Turin*, the following recipe: Collodion, 100 parts; carbolic acid, 10 parts; tannin, 5 parts; benzoic acid, 3 parts. Agitate until a perfect solution is formed. It is of a brownish color, gives a pellicle similar to ordinary collodion, and instantly coagulates blood.—*Indian Med. Gaz., July* 1, 1869.

DR. A. SCHUMANN reports a case of poisoning with arnica, in *"Schmitt's Jahrbuecher,"* which produced strong congestion towards the head, catarrh of the stomach and intestines, together with the depression of cerebro spinal nervous system. The treatment consisted chiefly in the use of morphia and extract of thebaine. The symptoms lasted for twelve days.

MEDICAL OFFICERS SERVING IN THE MILITARY DIVISION OF THE PACIFIC.

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Major and Bvt. Lieut.-Col. Charles McCormick, Surgeon U. S. A., Med. Director Dept. of Cal., San Francisco, Cal.

Major and Bvt. Lieut.-Col. Charles C. Keeney, Surgeon U.S.A., Attending Surgeon, San Francisco, Cal.

Major and Bvt. Lt.-Col. Elisha J. Baily, Surgeon U.S.A., Med. Director Dept. of Alaska, Sitka, Alaska

Major and Bvt.-Col. James T. Ghiselin, Surgeon U. S. A., Med. Director Dept. of the Columbia, Portland, Oregon

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Major and Bvt. Lieut.-Col. Joseph H. Bill, Surgeon U. S. A., Fort Vancouver, W. T.

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Capt. Richard Powell, Asst. Surgeon U.S.A., Camp Warner, Oregon
First Lieut. Benjamin F. Pope, Asst. Surgeon U. S. A. (on leave of absence).
First Lieut. Peter Moffat, Asst. Surgeon U. S. A., Camp Harney, Oregon.
First Lieut. Godfrey H. T. F. Axt, Asst. Surgeon U. S. A. (before a Retiring Board).
First Lieut. Charles B. Byrne, Asst. Surgeon U.S.A., Fort Boise, I. T.
Capt. Frank Reynolds, Asst. Surgeon U. S. A., San Juan Island, W. T.
Capt. John D. Hall, Asst. Surgeon U.S.A., with Engineers in Nevada.

ACTING ASSISTANT SURGEONS.

H. M. Kirke, Fort Wrangel, Alaska.
J. A. Tonner, Sitka, Alaska.
George Chismore, Fort Tongass, Alaska.
J. Williams, Fort Kodiak, Alaska.
William Shackelford, Fort Cape-Disappointment, W. T.
E. Y. Chase, Fort Colville, W. T.
Edward Conache, Camp Three-Forks, Owyhee, I. T.
C. B. Bryerly, Fort Klamath, Oregon.
L. Hubbard, Alcatraz Island, Cal. (on leave of absence).
A. H. Cochrane, Alcatraz Island, Cal. (temporarily).
M. W. Fish, Benicia Arsenal, Cal.
L. H. Patty, Presidio of San Francisco, Cal. (on leave of absence).
G. B. Higginbotham, Presidio of San Francisco, Cal. (temporarily).
D. Walker, Yerba Buena Island, Cal.
W. H. Corbusier, Camp McDermit, Nevada.
F. Denicke, Camp Winfield Scott, Nevada (sick).
W. B. Dods, Camp Winfield Scott, Nevada (temporarily).
F. S. Sterling, Camp Mojave, A. T.
A. F. Steigers, Camp Verde, A. T.
J. P. Webb, Camp Date-Creek, A. T.
T. M. Ames, Camp Colorado, A. T.
S. Whitmore, Fort Yuma, Cal.
H. K. Durant, Camp Lowell, A. T.
J. Dunlevy, Camp Reno, A. T.
W. D. Baker, Camp Goodwin, A. T.
W. H. Smith, Camp Bowie, A. T.
A. B. Lowe, Camp Grant, A. T.
B. Semig, Camp Crittenden, A. T.
L. L. Dorr, Camp Crittenden, A. T. (field duty).
G. S. Oldmixon, Camp Cady, A. T.
D. J. Evans, Camp McDowell, A. T. (field duty).

U. S. NAVY MEDICAL OFFICERS OF THE PACIFIC STATION.

Philip Lansdale, Fleet Surgeon, Flag-Ship Pensacola.
J. S. Dungan, U. S. S. Osipee.
J. M. Browne, Surgeon N. Hospital, Mare Island.
W. E. Taylor, Surgeon Navy Yard, Mare Island.
D. Kindleberger, Surgeon Rendezvous, San Francisco.
W. Johnson, Jr., Surgeon U. S. S. Jamestown.
J. Beardslee, Surgeon U.S.S. Independence.
C. H. Burbank, Surgeon U.S.S. Kearsage.
F. E. Potter, Surgeon U.S.S. Mohican.
T. C. Walton, Surgeon U.S.S. Resaca.
G. Brush, Pd. Asst. Surgeon U.S.S. Dacotah.
G. W. Wood, Pd. Asst. Surgeon U.S.S. Pensacola.
E. D. Pagne, Pd. Surgeon U.S.S. Jamestown.
S. F. Shaw, Pd. Surgeon U.S.S. Onward.
G. Lecompte, Asst. Surgeon U.S.S. Nyack.
W. M. Nickerson, Asst. Surgeon U.S.S. Pensacola.
J. A. Hawke, Asst. Surgeon U. S. S. Dacotah.
E. C. Thatcher, Asst. Surgeon U. S. S. Ossipee.
A. Frank, Asst. Surgeon U. S. S. Saginaw.
R. A. Marmion, Asst. Surgeon U. S. S. Ossipee.
J. E. Gillespie, Asst. Surgeon U. S. S. Mohican.
W. Owen, Asst. Surgeon Navy Yard.

☞ Any changes that may occur in this department, will be noticed from month to month.

PAMPHLETS AND EXCHANGES.

OCTOBER.

The Pharmacist and Chemical Record—September; The Canadian Pharmaceutical Journal; Medical Press and Circular; The Orleans Infirmary and the Medical Association of New Orleans; Transactions of the Medical Society of the State of Pennsylvania, Twentieth Annual Session—June 1869; Annual Report of the Tebo and Neasho Railroad Company—1868-9; Half-yearly Compendium of Medical Sciences; The Eclectic Medical Journal; Australian Medical Journal; St. Louis Medical and Surgical Journal; Edinburgh Medical Journal; Medical Press and Circular—London; Medical Mirror—London; American Journal of Medical Science; Medical Times and Gazette—London; Buffalo Medical and Surgical Journal; Boston Journal of Chemistry; Medical Examiner and Messenger of Health; New York Medical Journal—October; Chicago Medical Journal; The Cincinnati Lancet and Observer; The Cincinnati Medical Repository; Nashville Journal of Medicine and Surgery; The Medical Archives; The Dominion Medical Journal; British Medical Journal; The Medical and Surgical Reporter; Gynæcological Journal; Seventh Annual Report of the Peking Hospital; Western Journal of Medicine; Chemical News; The Orleans Infirmary and the Medical Association; The Probe.

ORIGINAL COMMUNICATIONS.

DR. SCOTT'S REPLY TO DR. BUCKLEY'S REVIEW OF HIS ARTICLES ON UTERINE DISPLACEMENTS.

In the September number of the *Gazette*, Dr. Buckley has done me the honor to review my papers on uterine displacements, and while deprecating in the strongest language the "base artifices commonly resorted to in opposing many of the valuable scientific improvements" in surgery, he professes to enter on the discussion of the subject in "an open and candid spirit of inquiry after truth, free alike from the desire to cavil or condemn." Had Dr. Buckley adhered to the Golden Rule he thus enunciates, I would be the last to complain of the fullest and freest discussion of a subject deserving the best consideration of the profession; but, instead of doing so, he has resorted to the unsparing use of "ridicule and exaggeration" for the purpose of casting odium on a treatment which he so oracularly condemns as "gross and unwarrantable surgery" and "against the teaching of all our most esteemed authorities." It is easy to call "hard names" but denunciation is not argument; and if the operations detailed in my papers are open to the appellation of "slitting up" and "laceration," I think we shall have little difficulty in showing, that the authorities to which he so confidently appeals, are equally guilty of this nefarious practice, and to a greater extent than I can venture to lay claim to. The whole gravamen of the charge brought against me consists in the assertion, "that incisions are not only unnecessary but injurious in flexions of the uterus," while he at the same time admits their "vast utility" "in strictures of the os, in cases of dysmenorrhea and sterility." Dr. Buckley is rather vague in his definitions, but I think we may with propriety assume, (in accordance with the most esteemed authorities), that in the term "stricture of the os," he includes the "os internum," as the frequent seat of stricture. What I have strenuously contended for, in the papers I have written, is the necessity of a more accurate diagnosis in uterine disease, as the basis of a true pathology; and nothing more fully justifies the truth of this assertion than the use of the term "stricture," which is indiscriminately applied to a constriction of any part of the canal of the cervix, or to that narrowing of the os externum, which should be more properly designated as "partial occlusion of the orifice." As my reviewer's tone is so purely ex-cathedra, I will not, I cannot, suppose him ignorant, that of all the pathological conditions to which the uterus is subject, that of ante-flexion is, "par excellence," eminently associated with dysmenorrhea and sterility; constituting in fact, that species of dysmenorrhea called "obstructive," and for the relief of which, surgical interference is deemed both justifiable and necessary by the "authorities" referred to. Now I have no desire to quibble about words, but, considering what a flexion is, a doubling of the uterus on itself, I ask Dr. Buckley if it does not create such a narrowing or constriction of the canal of the cervix, as constitutes to all intents and purposes, a "stricture," and which is more or less marked as the angle assumed is more or less complete. In ante-flexion this is eminently the case, and occasionally the stricture is so complete, owing to adhesive inflammation having taken place at the point of flexion, that not even the smallest probe can be passed into the cavity of the uterus, and what was at first a "stricture" becomes at length a complete "occlusion." The fact is, it is difficult to conceive the existence of a "stricture" without a "flexion," for that constriction of the canal which constitutes a "stricture," necessarily involves such an interruption to the circulation between the upper and lower sections of the uterus as will cause a flexion, and whether the flexion has caused the stricture, or the stricture the flexion, the fact remains the same. The one is as a rule associated with the other. If this statement is a correct one, and I appeal to all who are intimately acquainted with such cases—what Dr. Buckley calls a stricture I call a "flexion *plus* a stricture," or *vice versa*—and the only question to be considered is the difference between the treatment of "our most esteemed authorities" and that of my humble self. What is the treatment for "stricture of the os" or "obstructive dysmenorrhea," as first initiated by Sir James Y. Simpson; carried out by the majority of the profession, both in Europe and elsewhere, and finally approved of and endorsed by Dr. Buckley himself? Here it is, as detailed by Dr. Marian Sims, in his book on uterine surgery, (page 155), and witnessed by him. "He (Simpson) places his patient on the left side, introduces the index finger of one hand into the vagina, pushes the fundus uteri up if it be anteverted, passes his uterotome along the cervix *through the os internum*, springs the blade, and withdraws the instrument cutting open the side of the cervix; the other side is cut in like manner, thus making a bi-lateral incision of the cervix, *large enough to allow the index finger to be passed to the os internum*; and as before stated, he then passes into the vagina a large camel's hair pencil saturated with the solution of the perchloride of iron." Dr. Grailly Hewitt endorses this practice and mentions with approval the double-bladed uterotome of Green-

halgh as enabling the operator to incise the part of the cervical canal *at the situation of the internal os uteri* better than the original one. Now if this operation, sanctioned, be it noted, by "most esteemed authorities," does not merit the appellation of "slitting up" or "lacerating" the uterus with a vengeance, then words have ceased to have a meaning. And I ask the candid reader to compare it with the cautious and careful division "of the constricted point, sufficient to allow of the free movement of the sound backwards and forwards," as practiced by Dr. Emmet and myself, and then say, whether Dr. Buckley's aspersions are not both *unjust and unwarrantable.* That the uterotome is a most dangerous instrument in inexperienced hands but few will deny, and that it is not free from danger even in the hands of its distinguished originator, has been proved by the fact of alarming and even fatal hemorrhage having occurred in his practice. As regards Dr. Greenhalgh's double bladed instrument, I was present at a case operated on by him in London, in 1866, which was followed by bleeding it was found difficult to control, and which placed the patient in considerable peril.

Dr. Buckley goes on to speak of the disastrous effect of applying "a caustic fluid"—perchloride of iron—to a raw and bleeding surface. Surely he might have informed himself of the fact, that Sir James Y. Simpson uses this identical solution after his operations, and if it is the *caustic* he so graphically represents it, of what barbarity must the celebrated Dr. Robert Barnes of London, be guilty, when he advises the injection of this fluid into the cavity of the uterus in post partem hemorrhage? If the cavity of the uterus after delivery is not a "raw and bleeding surface," I know not what to call it. Perchloride of iron when recently prepared, or when kept dissolved in *glycerine* is simply a *harmless styptic*, and Sir James Y. Simpson has mentioned as an instance of its harmlessness, how a patient swallowed a solution of it by mistake and only paid the penalty of doing so in the form of a severe stomach-ache. Dr. Buckley speaks of 60 per cent. of the uterine cases seen at the North Dispensary of Liverpool, "as consisting of leucorrhea, depending simply on constitutional causes and nowise connected with 'malposition.'" Unfortunately he admits the absence of reliable statistics in this matter, and we have only his "dictum" for the assertion, that, in this large proportion of cases, the existence of a chronic discharge was found unconnected with such structural disease as is found by more accurate observers to accompany, and, in their opinion, to cause it. "General debility" is a very convenient term to use on such occasions and saves a vast deal of trouble, but the usual routine, of iron internally with astringent injections, either fail to arrest the discharge, or end by increasing the uterine congestion or inflammation which causes it. The theory may be very plausible, but the practice is a failure.

When I spoke of "erosions and induration of the cervix" as but the "expressions of a disease which affects the body of the uterus," I meant, however imperfectly I may have expressed it, what is too commonly lost sight of in practice, namely, that of directing the treatment so exclusively to the erosion itself, instead of to the cavity of the uterus from whence it has proceeded, and, if this fact were more frequently recognized, we should have less of that empirical practice, which consists in constant cauterizations of the abraded surface, resulting at best in healing it over by locking up the actual disease in the interior of the organ itself. When Dr. Buckley affirms "that in no case does Dr. Marian Sims or Dr. Emmet incise beyond the *cervix*," he states what is simply *not true.* The latter has published a monograph on his operation for ante-flexion, and at pages 8 and 9, he says: "In such cases (ante-flexion), for the purpose of straightening the canal, I have found it necessary, in addition, for their relief, freely to divide the angle of flexion formed by *the doubling of the anterior wall of the uterus* upon itself; without this step no permanent relief can be obtained." In the above monograph and in Dr. Sims' book will be also found those "artistic prints of a morbid uterus, sketched from a bladderless subject," so sneeringly adverted to. Has Dr. Buckley had many such cases to treat as that very briefly described by Dr. Davies, as "hyperthropied and indurated uterus complicated with menorrhagia," and will he favor us with his successful treatment of them? Is it so entirely "unscientific" as he wishes to make out, to divide the engorged vessels of the lining membrane of the cavity of the uterus, followed up by the application of a styptic to arrest the bleeding, and, after a suitable interval, to dilate the cavity by sponge tents, and inject tincture of iodine, for the purpose of inducing softening of the parenchyma and the reproduction of a healthy mucous membrane? If he knows of a better plan of treatment in these most trying and obstinate cases, I hope, for the sake of suffering humanity, he will reveal it. The parallel which he attempts to draw between diseases of the stomach or bladder and a diseased uterus, is so far fetched and unreal, as simply to excite the ridicule it deserves. And now let us hear the conclusion of the whole matter. Flexions of the uterus are confessedly the most troublesome and intractable of all the non-malignant diseases of

the uterus, and in their pronounced forms always associated with much local suffering and deterioration of the general health; and so constantly regarded as incapable of complete removal, that one naturally hails with interest any rational method of treatment which can be considered likely to advance our knowledge of the subject. Believing that I could do something towards the attainment of this object, I ventured to lay before the profession the views embodied in my published papers, and that they were not deemed so unworthy of consideration as my reviewer seems to think, is evidenced by the fact that the London *Lancet* thought them of sufficient interest, as to lay them before the profession in Europe. Dr. Buckley thinks my *pathology* unsound; that it is not considered so by one of the first living authorities of the day, Dr. Matthews Duncan of Edinburgh, is proved by a letter which I had the honor of receiving from him, after the perusal of the articles in question, and in which he says: "Your treatment of flexions I hope to try, and try with hope." *

Dr. Buckley has made use of "old and time honored" weapons in his ruthless assaults on my practice, but he must be a very young man indeed if he is not aware that the great Simpson himself, was similarly assailed when he invented and advocated the use of his now famous uterotome. Well, he has survived these attacks, and it is just possible that such a humble individual as I am, may continue to exist, notwithstanding the onslaught of my doughty antagonist. To say the truth I feel vastly flattered by his statement, that my contributions have attracted much attention from the profession, for if they were so utterly worthless why notice them at all? Dr. Buckley has done his utmost to discredit my treatment—has he put anything better in its place? If I understand him aright his only substitute consists in "rest, douching and the use of the uterine sound, to restore the fundus to its normal condition" in recent cases, and in the more confirmed and intractable ones, the old, old remedy of the pessary. Now, that recent cases of *retroversion* may be amenable to such treatment, combined with attention to the alvine evacuations and other hygienic considerations, I freely confess; but that *retroflexion*, which is an advanced condition of the backward version, is curable by such remedies, I most vehemently deny, and my denial is amply borne out by all (see West and others) who have had more experience in such cases than has evidently fallen to the lot of Dr. Buckley.

He may question the precise condition of the "point of flexion," but the possession of the "tactus eruditus," will demonstrate this at least, that the flexion is the seat of induration,—interstitial deposit—and that it interferes most materially with the circulation between the upper and lower sections of the organs, the restoration of which constitutes an essential element in treatment. Artificial support—the *pessary—then* is after all, in his estimation, the great desideratum, and the use of which, be it noted, extends not over a definite, but an *indefinite* period, till—in the married—a chance pregnancy takes place which, *may* effect a cure (how seldom this takes place and how frequently it recurs after parturition, is testified by West and others), or, it must be worn till that long hoped for and much desired period arrives, the change of life, when atrophy of the organ no longer necessitates its use. Oh, most lame and impotent conclusion! As well might it be considered good surgery to treat a "prolapsus ani" with a "rectal pad," or, in the case of a dislocated joint, so to prop up the limb as to relieve the pain which it produces by pressure on the surrounding parts! The positive evils, to say nothing of the offensive discharges attendant on the use of pessaries, are such as no sophistry or fine writing can conceal; and limited must be the experience of those who cannot testify to the damage they often occasion. A uterine displacement is detected, no matter what its nature—stick in a pessary and hope for the best—this I say is the common and indiscriminate practice, and the result too commonly happens that first irritation, then inflammation takes place; in some cases, pelvic cellulitis, impaction, perforation, (occasionally death), are the consequences. As one of out of many such cases I may mention that I was some time ago consulted by a young lady of 19 years, who informed me she was wearing a pessary for "turning over of the womb" and whom I found suffering from fever and severe local pain; the vagina was so swollen and inflamed, that I had to put her under chloroform before I could with difficulty extract a Hodge's pessary, which had become so impacted that perforation of the gut must have taken place if its extraction had been longer delayed. When Dr. Buckley quoted my remarks on the use of the pessary, he had no right to abbreviate them, for, in asserting that they did not place the organ in its natural position, *and maintain it there*, I added, "take a retroflexed uterus, and is it possible, with the best devised pessary ever constructed, to raise the fundus fairly *above the promontory of the sacrum, and retain it there?* Is not the vagina universally relaxed in these cases, and can you rely on a distensible organ as it is, for affording the resistance which is needed to enable

* Extract seen by one of the Editors of the Medical Gazette.

the pessary to give the requisite support? and, if unable to rely on its support, you insert an instrument sufficiently large to elevate the weighty organ, pressure must be exercised on the rectum behind and the urethra in front—and with what sad results experience can abundantly testify. "As regards 'ante-flexion,' I stated, that any one who considers the actual position of the organ must perceive that the pressure exercised is applied, not to the overhanging fundus, but to the point of flexion itself." As regards "stem" pessaries, I really did not think it necessary to refer to the repeated discussions in the French Academy of Medicine concerning them, and the condemnation of them, as highly dangerous and occasionally fatal, which was pronounced by a large majority of that learned body. But, coming nearer home, Dr. Buckley can hardly be ignorant how strongly their use was and is deprecated in the British Isles. What says West (3d edition, page 182-3-4), "still by degrees, unfavorable results began to be more generally heard of; much uterine pain, almost constant leucorrhea, associated with a distressing sense of pruritus; menorrhagia and hemorrhage between the menstrual periods were found to be of no very rare occurrence." The objections he states are:

1st. "The necessity that their use should be continued only a few hours at a time, consequently two vaginal examinations a day.

2d. "The quietude imposed in order to avoid severe suffering and the risk of serious danger.

3d. "In spite of all precautions, the treatment is generally painful, often dangerous, sometimes *fatal*, while relapses are very frequent after mechanical support is discontinued."

"On these accounts, though I have tried the uterine supporter in a few cases, I have now for some time quite given up its employment!" So much for West, and now for the reviewer's "most esteemed authority." Dr. Grailly Hewitt, (1st edition, page 547), says "Dr. Simpson has contrived two instruments, of these, one has its fixed point from without, a stem pessary into the uterus; a second has its fixed point in the vagina." "The objections to all fixed instruments hitherto brought forward appear almost *insuperable*, though the objections are not equally weighty in all cases. If the uterus be strongly inclined to bend backwards, there will be a constant pressure against the extremity of the intra uterine stem, which may lead to *perforation of the uterine wall*, short of this, to violent irritation, inflammation, peritonitis and *death*." But why multiply authorities? Why beat the air? only as a fitting climax do I give Dr. Buckley's own words, "now where are we to find the 'dire fatality' so graphically sketched in the above quotation? Surely the record of it ought to be given to dissuade us from a practice, at once so venerable and so highly recommended. Really the use of Bunkum can no farther go! Dr. Buckley asks how is a prolapsed ovary to be diagnosed? I beg to refer him to the bottom of page 389, of West's diseases of women, 3d edition, —and "when found make a note of it."

I had for some time determined not to reply to the above critique; 1st—Because the evident "animus" of the article was unmistakable; 2d—Because it was no easy matter to follow the writer in his discursive wanderings, wherein he finds out such portions of my writings as suit him for attack, while he omits the context which would have elucidated the author's views; and I answer it now only by the persuasion of professional friends, whose judgment I esteem, and who think that such charges should not remain uncontradicted. I think I do my reviewer no injustice in assuming, from the tone of his writing, that his opportunities for acquiring an intimate knowledge of uterine pathology and therapeutics have not been extensive, and while admiring the brilliancy of his diction and his copious vocabulary, I would venture to advise him to be less "trenchant" in his future use of them. He ought to conserve his powers more carefully, (for I hope he has a long and brilliant career before him), and to remember that it is more merciful and sometimes wiser, to be content with trying to rout one's opponent without aiming at his extermination, for the engineer is sometimes "hoisted with his own petard." I can lay no claim to "fine writing," but what I do claim is, "the honest expression of honest convictions," and for their utterance, such respect as is usually accorded them. We are all learners, from the day we enter the profession till the day we leave it, and I for one honestly declare my utmost willingness to find out the "better way from any one who will teach me; and having found it, to profit by the instruction, from whatever source it comes, even though the doing so should entail, not only the modification but the relinquishment of what I may once have cherished.

AUTOPSIES MADE BY J. LETTERMAN, M. D., CORONER OF SAN FRANCISCO.

Reported by Edwin Bentley, Ass't Surgeon U. S. Army.

Case 1st—"Hanging."

C. A. A., Prussian, soldier, aged 39 years.

Autopsy about eighteen (18) hours after death; rigor mortis present; deep suggillations on the head, face and neck; and a deep impression, the mark of the rope, to be distinctly seen; denuded of cuticle; Sectio Cadaveris.

Head.—Free hemorrhage from transverse incision of the scalp; congestion of the vessels of the brain; blood fluid—four (4) ounces flowed from the dependent membranes.

Thorax.—Lungs congested and attached posteriorly by strong old adhesions; cavities of the heart distended with fluid blood; no coagulæ.

Abdomen.—Liver presented a well-defined nutmeg appearance; kidneys fatty; spleen enlarged and pultaceous; stomach inflamed; intestines healthy.

Case 2d—"Suicide."

C. B., New England, miner, aged 46 years, strong, robust physique.

Autopsy thirty-six hours after death; cadaveric rigor of all the limbs; deep suggillations about the dependent parts of the body; blood over the neck, chest and arms; just above and in front of the right ear, was observed a wound from pistol ball penetrating the head; Sectio Cadaveris.

Head.—Extensive suffusion of blood in the scalp, and membranes about the wound; slight extravasation in the temporal fossa; a stellated fracture at the entrance of the ball. the lower fissure extending across the base of the skull to the opposite side; the ball found imbedded near the centre of the middle lobe of the left hemisphere.

Thorax and Abdomen not examined.

Case 3d—"Homicide."

A. H., Chinese, contractor, aged forty-four (44) years.

Autopsy ten (10) hours after death; hair, face and clothing about the neck covered with blood; rigor mortis very strong; body robust, well nourished; a pistol wound observed just below the right ear and behind the insertion of the sterno-mastoid muscle. An incision exposed a fracture of the atlas on the right side, and the course of the ball into the cranium, which, on being opened, a further fracture on the right of the foramen magnum was observed. The ball was found to have severed the medulla oblongata, at its connection with the spinal cord, cut its way through the lower side of the left hemisphere of the cerebellum, and having penetrated to the external angle of the petrous portion of the temporal bone, had rebounded or been displaced by falling; was found buried in the centre of the middle lobe of the left hemisphere.

Thorax.—Strong, healthy; cavities of the heart empty.

Abdomen.—Hypertrophy of the liver; softening of the spleen; stomach very large; pancreas soft, flabby; kidneys healthy; intestines of a leaden hue and very large calibre; death instantaneous.

Case 4th—"Apoplexy."

History.—W. R., born in Russia, and by occupation a laborer,—forty (40) years of age—of a large muscular physique, being found on one of the city wharves in an unconscious condition, was taken to the City Hospital, where all practicable means were employed for his resuscitation without avail. He lived after admission to the Hospital, 36 hours.

Autopsy 18 hours after death; suggillation observed about the face and head; neck remarkably short; well marked rigor; pupils dilated; Sectio Cadaveris.

Head.—Scalp congested and bleeds freely from transverse incision. On removing the top of the skull no coagulæ are found in the sinuses; four ounces of blood runs from the dependent membranes; the left lateral ventricle enormously distended with clots of blood, and the entire left hemisphere suffused with blood.

Thorax.—Lungs healthy; an unusual deposit of pigment; old adhesions on the left side; heart normal, fluid blood in all the cavities; large arteries atheromatous, on opening which, bubbles of gas gushed out.

Abdomen.—Liver and spleen, soft and pulpy, the latter covered on its convex surface with a lamina of fibro-cartilage tissues from two to three lines in thickness.

Case 5th—"Compression of the Brain."

A. Y., Chinaman, laborer, aged 40 years, received a stroke on the top of the head, from an Oregon pine stick, two inches wide, one inch thick and six feet long, in the hands of a fellow-countryman.

Autopsy 12 hours after death; body compact and muscular; Sectio Cadaveris.

Head.—Slight external wound, very little hemorrhage. On separation—the scalp—a fracture was observed in the upper and posterior part of the frontal bone, a little to the right of the median line, extending horizontally one inch, from the centre of which, forming a T shaped point, a seam run down into the temporal fossa. After the top of the skull was removed, two ounces of coagulated blood was found on the right side, external to the dura-mater, and extending to the base of the brain. The fracture was now found, on removing the dura-matter, to have reached the petrous portion of the temporal bone, and to have opened the superior petrosal sinus, giving rise to the hemorrhage and extravasation.

Thorax.—Lungs and heart healthy.

Abdomen.—All the visceræ healthy; the lacteal system distinctly seen injected with *lymph.*

Case 6th—"Wound from Colt's Army Revolver."

M. A., shop-boy, New York, aged 15 years, received a wound from some unknown source, while standing in a partially inclined posture.

Autopsy 18 hours after death; a healthy looking lad—a well-formed rigor mortis remaining; Sectio Cadaveris.

Head.—Extravasation of blood about the scalp and back of the neck. The top of the skull being taken off, the ball fell out, and on examination found to compare with those used in Colt's army revolver. The encephalon was removed, and on tracing the wound the ball was found to have entered the right side of the occipital bone, just below the infra-occipital ridge, and passing between the tables, raising the inner, entered the cavity of the cranium at the foramen magnum, and lodged in the entrance to the fourth (4th) ventricle; no suffusion of blood within the skull; the lower third of the medullar severed by the ball; death instantaneous.

Cavities of the body not opened.

[Continued from page 47.]

HYPODERMIC USE OF ERGOT.

By C. T. Deane M. D., Physician and Surgeon of the S. F. Female Hospital.

In a previous article I proposed contributing a few more ideas on the subject of hypodermic use of ergot, and its effects. For years it has been used for other purposes than uterine contraction during labor, but I believe not until lately has it been used hypodermically by Langenbeck and others, both in France and Germany. They appear to have experimented largely in several diseases; want of time will however prevent me from premising more than a brief synopsis of the application (hypodermically) of ergot, and its results. Unfortunately little is known of the active principles of the seed. It has often been analyzed, but the chemical property which produces the specific results have not been determined. The poisonous effects are said to come from an ethereal oil, which is not contained in the watery extract.

It has been used beneficially in pertussis, hæmoptysis, epistaxis, aneurism and amputations.

In pertussis it is supposed to act on the vagus or pneumogastric nerve, lengthening the time materially between the paroxysms of coughing, besides lessening the coryza to a great extent. Since the last publication of the *Gazette*, I have applied it in an obstinate case of pertussis, and am much pleased with the result of the experiment. I used the watery extract according to Beaujean, and injected it in the arm every other day for eight days, until the case had advanced so far that I did not wish to subject the child to the annoyance of the *piccure* of the syringe any more. In pneumorrhage the effect is said to be instantaneous. In epistaxis it arrests it in a very short time. Its effect in aneurism has already been detailed. I would simply state in connection with this disease, that since the appearance of the first article, a physician of San Francisco has used it for an aneurism of the femoral artery, and he thinks with decided success so far; however the time has been too short to determine as yet its effect. In amputation it is asserted by Langenbeck, to have very much diminished oozing and promoted union by first intention, besides lessening the chances of pyæmia. A series of observations have been published by a Swede, to the effect that hypertrophy of the heart is sensibly relieved, and its normal action re-established by the use of the Secale. Being a subject which has only recently attracted my attention, the few applications I have made and the few sources I am able to glean any information from, prevents me from enlarging any more at present. However the suggestion may prove of value to some of my brother practitioners, and through them to a multitude of suffering human beings.

CORRESPONDENCE.

Messrs. Editors:

With the vast advance, and unblushing effrontery of quackery in our midst, it cannot be out of place to say a few words on an unusual phase of it.

An institution coeval and co-extensive with the human race, we cannot rationally hope to see perish in a generation; nay, it is questionable if charlatanism has in it at all the elements of decay, depending as it does for vitality, on two forces of such vast magnitude, and so inseparable from our human nature, as the love of the marvellous and the love of life. Strangle its present form to-day and to-morrow with Protean adaptability it will in new shape arise, or dangling before the public gaze, not unlike the remains of the gibbetted criminal, will attract the multitude even by its grotesque horror if by nothing else. Every age and state of society, no matter how rude or refined, seems to afford equal pabulum for its maintenance. The superstition and devotion of the old Eyptians paraded the deified Ibis through the streets of Thebes; the superstition and credulity of Californians—still human—virtually parade a no less voracious cormorant, in shape of a "King of Pain" through the streets of San Francisco. Well aware, though every medical man must be of the utter futility of attempting to destroy this hydra of quackery, nevertheless it will ever be his bounden duty in the interests of society and Truth, to check and control its progress, wheresoever it appears, with

all the force and energy and weapons that Truth will admit into her contests. Our present object is not with creatures of the Ibis genus, nor with those *illustrious* physicians among us "who are daily performing wonderful cures" after *imaginary* consultations in Europe—mostly on Americans they *regret* to say—with men whom if they ever saw it was surely at a distance. Such despicable stuff is beneath our contempt, and the dupes of it beyond our counsel. Hunger is a gigantic stimulus to evil, and a powerful apology for lying, and Heaven forbid that a noble and charitable profession should grow irate, because a few poor starving devils skulk round its threshold, and betimes purloin wherewith to eke out a false existence. Courage! you poor hungering degraded squad, the advancement of civil law and social science will afford you a means of honest maintenance at least in a State Penitentiary. Unfortunately at present we have to deal with a much more heinous form of criminality as the plea of hunger is wanting, and the criminals are preachers and propagators of that beautiful Christian aphorism: "Do unto others as you would be done by." Why the ecclesiastical mind should be a more congenial soil for medical knowledge than that of the barber we are unable to explain, but certain it is that while the latter, overwhelmed by the growth of natural science and the principle of "Division of Labour," has long since resigned all pretentions to the healing art, the former still clings with perplexing tenacity to the barbarous usages, and grotesque airs of uncultivated and credulous ages. It must be that ecclesiastical education implies medical inspiration, otherwise how could a Rev. Mr. Ellingwood, pronounce so dogmatically on the remedial superiority of those *delicious* Chinese potions, over all the resources of our Pharmacopeia and surgical arsenal; nay it must be that the mere dwelling in the ecclesiastical precincts is sufficient to fill a mind of the coarsest calibre with a higher knowledge of this most abstruse study, than the most subtile intellect can acquire in the dissecting theatres and hospitals specially devoted to it; for else, how could a Brother Borgio, rescue from the "jaws of Death"—as the phraseology goes—such multitudes of tottering mortals. In all seriousness, we have no desire to quarrel with ecclesiastical charlatanism, provided it be kept within what we consider the ecclesiastical limit—the supernatural. We are among those who believe that no physical malady has ever been directly aggravated, by the solemn pronouncing of a pious chapter, or the graceful extension of a respectable arm over a credulous head. We could afford to smile at innocent joking of that character, but when we find ecclesiastics, completely ignorant of medical science—no matter how highly educated otherwise—no matter how high their moral pretensions, fearlessly prescribing all the dangerous drugs of our Pharmacopeia, recklessly meddling with two such precious gifts of God as Health and Life, it clearly becomes our duty to enter our strongest protest against the practice. There is, it seems, at the college of the Jesuit Fathers at Santa Clara, an individual named Brother Borgio, who, if he continues his present brilliant career, is not at all unlikely to achieve for himself on the Pacific slope as much and as *creditable* fame, as the world-known Lucretia, of painfully kindred patronymic, ever attained on the slopes of the Mediterranean. On this Frere Borgio himself, it would ill become us to waste any words of ours. We consider him a very excusable creature, for there are very few ignorant people who are not largely endowed with curiosity of a coarse nature, and to an individual who has been scouring cooking utensils, and cleaning dormitories the greater part of the day, we can imagine few things more attractive, than a little inquiry into family secrets, and examination of the "human form divine" by way of recreation. It may not be true, as some state, that Frere Borgio spends much more time examining his female than his male patients, but certain it is that the number of clients of the weaker sex predominate. We should possibly be amused at the pretentious and impertinent meddling of the poor charlatan himself, if the consequences of it were not so grave, but that men of high intellectual culture like the Jesuit Fathers, who must be well aware of the continued and undivided attention, the concentrated and sustained thought necessary for the attaining proficiency in any branch of human knowledge, should permit such buffoonery seems to us wholly inexplicable. We ask those gentlemen in the name of common sense would they take this *cavamacchie* from his pots to scour out a deeply adherent moral rust which they could not themselves dispel; would they introduce him into the confessional to decide a very knotty and delicate point in moral theology with which they felt themselves inadequate to deal? Ifthe brilliancy of his genius be such that the answer would be affirmative, why not elevate him at once to the sacredotal status and give his *great* mind full scope for its natural development; but if not, if his capability be wholly of the muscular variety, as his position proves, why tolerate his fearful trifling with the precious lives of men and women. Have not the clergy of Santa Clara sufficient intelligence to understand the immense intellectual power, the ex-

tensive and varied range of knowledge, the unwearying and calm contemplation of disease, necessary for even moderately successful medical treatment? Do they not know that the most comprehensive intellects among mankind, solely and diligently devoted to the study and practice of this art, are by no means free from remorse occasionally, by no means successful at all times in guarding against blunders? Can they not see how irretrievable the consequences may be to human health or life, of one irregular step, of one untimely dose of those powerful drugs so fearlessly wielded by their domestic? We wonder if Frere Borgio would be the physician relied on in case of a severe illness of one of the fathers? We should think not, and we consider it a disgrace to the intelligence—not to say morality—of any community to tolerate, that a man of this capacity and training, because he occasionally cleaned out the apothecary's shop and smelled the phials, should be allowed to impose on the credulity of ignorant people, and freely tamper with the human constitution; nay even detract as he occasionally does, the rational and beneficial treatment of intelligent, conscientious practitioners.

We may be told, "this is all selfish, it is because he interferes with the doctors' fees." Our reply to this now and at all times is, that in a pecuniary sense the medical profession is benefited by all the untutored meddling of amateurs and quacks, and in the instance before us, if swayed by merely mercenary motives we should have occasion to thank rather than condemn this self-same Frere Borgio. We, in common with several other practitioners, have lately had several respectable fees for imaginary diseases created solely and wholly by the dictum of the *infallible* Frere. But, unfortunately, we have also seen cases of actual malady, terribly aggravated by his treatment. We can scarcely think that the Jesuit Fathers have the remotest idea of the "slaughter of the innocents," perpetrated by their daring domestic, but of the general facts—that the practice of medicine, of all other arts, admits of no blunders—that the greatest minds constantly devoted to it are not, at all times free from blunders, and consequently that this man altogether devoted to other pursuits must be eternally blundering—they must be well aware; and we feel confident that they only require to be reminded of the evil to check it. We cannot reconcile with any form of Christian teaching, with any high code of morality, such fearfully destructive trifling with the Heaven-sent blessings—Health and Life.

Yours,

TELEMAQUE.

PHILADELPHIA, November 6th, 1869.

Messrs. Editors:

A medical "Institution" which we have here is worth your copying, unless you have such already, viz: our "Medical Book Clubs" or "Medical Journal Clubs." Following the original "Philadelphia Medical Book Club," there have been established in the city, four others, all practically organized alike. Let me give you an outline of that of the "Philadelphia," of which I am a member. Each member pays $10, annually, and as there are 31 members, the funds of the society amount to $310, to which is to be added the amount realized by the sale of the books and journals at the end of the year (about $140). This amount is expended annually under the direction of the "Book Committee" in the purchase of books and subscriptions to various journals. In the front of each book is a list of the few and simple rules of the club, as follows:

1. Cut the leaves carefully.
2. Do not keep a book longer than the time allowed, under penalty of 25 cents a week.
3. Forward one book at a time, to keep up an equitable distribution.
4. The time of an absentee is allowed to the succeeding member.
5. Note in ink the date, when received and delivered, under fine of 25 cents.
6. Notify the secretary in writing, when you leave town and when you return, under fine of 25 cents.
7. The member whose name is underscored, will return the book to the secretary.

In the back of each book is a numbered list of the members and their residences, with the number of days allowed for reading the volume, which varies from three to ten days.

The books are sent by the secretary to one member (varying the person in each case, each journal however, being always sent to the same person first), and when he is done with it, he forwards it to the next member, the last one returning it to the secretary. At the end of the year, the books are sold at auction in the Club, many of course selling for a very small sum, but valuable books often bringing their full price and sometimes even more. The average of the sale is about 40 to 50 per cent. of the cost.

Each journal is enclosed in a half morocco cover while circulating.

The obvious advantage is that for $10, each member has the opportunity of reading some $450 worth of books and journals, and then of buying them at about half-price when very slightly, if at all, defaced. Usually our own Club has some 50 to

70 books for sale each year, besides about 15 journals. Some Clubs are limited to journals only. Our own subscribes to no American journals, it being supposed that these will be taken by the members, or read at the College of Physicians; but limit the subscription to English, French and German journals. A number of ladies whom I know, have also established a similar Club for literary journals and reviews.

The medical colleges are all in full operation, and I am glad to say with very large classes. That at the Jefferson numbers more than for any year since the beginning of the war, and will probably number over 400. At the Clinic lately, Profs. Gross and Pancoast, have each had one of those troublesome operations for anchylosis of the lower jaw, which have been brilliantly successful. In the case of Prof. Gross, (to whom Mr. Heath has lately paid so deserved a tribute in his "Diseases of the Jaws"), a young lady of 22, the anchylosis was bony, with complete closure of the mouth, and had existed since 6 years of age, yet by means of the saw, bone-forceps and wedges, he was enabled to open the mouth to a large extent and without any serious complications. The mouth too was so deformed that it had to be reformed by a plastic operation, the flap being taken from the cheek and chin.

At the Almshouse recently, there have been discovered in post mortems, two of those curious cases of Trichina Encapsulation, the result of poisoning at a remote period of which no history was obtained. A number of specimens have been exhibited at the Biological and Microscopical Section of the Academy of Natural Sciences, and from them specimens have been mounted by Mr. Walvesley and others, and can be obtained from McAllister and Queen.

An Obstetrical Society has been started recently, with very admirable results so far. The Society meets at the College of Physicians, and numbers some fifty or sixty members already.

Another mark of our progress also, is the publication of the very valuable "Philadelphia Medical Directory." It contains a short account of all our medical institutions, such as the College of Physicians, the Medical and Dental Colleges and Societies, with their rules and regulations; the various Hospitals, with their staffs, the mode and conditions of admission; the charitable and other societies, which have physicians and surgeons attached to them; lists of male and female nurses, with their residences; surgical instrument makers, etc., and a complete medical directory of all regular physicians, with their residence and office hours —a great convenience in case of consultations, to know who is a proper man with whom to consult, and in case of business to know when to find a man in his office. Dr. Packard, the Secretary of the College of Physicians, is the editor.

In the Pennsylvania Hospital, Drs. Agnew and Hewson have recently fully confirmed their first favorable reports on the use of waxed paper, as a cheap and efficient substitute for oiled silk. Ordinary thin tissue paper is passed once through melted wax and dried, when it is ready for use. Many of our Hospitals are employing it now and with the greatest satisfaction. I send you a sample for inspection. Very truly yours,

K.

BIBLIOGRAPHICAL NOTICES.

The Mechanism of Dislocations and Fracture of the Hip, with the Reduction of the Dislocations, by the Flexion Method. By Henry J. Bigelow, M. D., Professor of Surgery and Clinical Surgery in the Medical School of Harvard University, &c. Philadelphia; Henry C. Lea, 1869, pp. 148.

We presume that many of the medical men throughout the United States are more or less familiar with Dr. H. J. Bigelow's researches, in reference to Dislocations of the Hip. For several years he has annually demonstrated upon the Cadaver—to the medical classes at Harvard,—as well as to different medical Societies on several occasions, the views that he teaches in this volume. Having had the good fortune to be one of the number to witness his demonstrations in 1861—we have looked the more anxiously for the appearance of this work. Knowing full well from experience, that to comprehend the details of the author's method of reducing dislocations of the hip, will make a surgeon wiser, safer, and more useful to any community—will rob the operation of its horrors, alike to surgeon and to patient.

Sir Astley Cooper may be said to be the first who systematically arranged the dislocations and fractures of the hip, and his work, the last edition of which is dated 1842, may be said to still retain its prestige in the profession. Malgaigne published a work in 1855 in which he endeavored to establish more accurate theories than had then been submitted to the profession; since which time Gürlt in Germany and our own Frank H. Hamilton, have each written to accomplish the same object. That they have each constructed more elaborate theories than Sir Astley Cooper is granted, but that they improved much upon his practice is not so evident. In fact the administration of chloroform or ether, may be said to be the sole improvement

in the reduction of dislocations of the hip, (except in the practice of a few individuals hereafter to be mentioned), that we possess over the practice of Cooper. We presume that there is not a well organized hospital in this country or Europe without its pulleys, and all the appliances of a first class inquisition; and probably very few in whose amphitheatres medical students have not been instructed in their use by actual demonstration, within the present year. It is not long since we saw a poor fellow nearly pulled in pieces, simply because he had, had the misfortune to dislocate his hip. The *Doctor* who superintended the job, looking admiringly at his pulleys, jack towels, skeins of yarn, and six stalwart tars who did the heavy pulling; remarked that he had had thirty years experience of that business. The dislocation was dorsal, and any intelligent medical student, who had carefully followed Dr. Bigelow's lectures and demonstrations one year could have reduced it by manipulation, probably in less than a minute.

Dr. Bigelow does not claim originality for his flexion method of reducing the hip. On the contrary he tells us that the method is as old as medicine itself, and quotes Hippocrates as follows, "In some the thigh is reduced without preparation, with slight extension, directed by the hand, and with slight movement; and in some the reduction is effected by bending the limb at the joint, with gentle shaking." "In view of this observation (Dr. Bigelow remarks) of the Coan sage, 450 B. C., the indiscriminate use of pulleys hardly testifies to the progress of modern science." The author also quotes the various modern surgeons, who at different times have written on reduction by manipulation; for instance Dr. Nathan R. Smith in 1831—Depres in France 1835,—Dr. W. W. Reid N. Y. 1852,—Mr. Nunneley in 1866, etc. No writer however, before Dr. Bigelow, as we will hereafter show, fully comprehended the mechanism of the dislocations of the hip.

The author's theories are not speculative, but are founded upon facts, which are the result of repeated examinations and careful study of the structure of the capsule of the hip-joint.

We may quote the following as the great principles of his doctrine, viz:

"Without denying then that muscular fibre exerts both on active and passive force, it is here assumed that the muscles play but a subordinate and occasional part—either in hindering reduction or in determining the character of the deformity, and that this is chiefly due to the resistance of a ligament, the power of which will presently be illustrated, and whose simple mechanism will explain the phenomena both of luxation and its reduction."

"The theory here advanced recognizes the anterior portion of the capsular ligament, as the exponent of the total agency of the capsule in giving position to the dislocated limb; and, what is more important, as so identified with the phenomena of luxation, that reduction must be accomplished almost wholly with reference to it."

Though Dr. Bigelow is by no means the first to describe the forked appearance of the ilio-femoral ligament; he is the first to recognize its vast importance. Boyer, Gunn and several others, have refered to the capsule as exerting some influence over the position and reduction.

We will give the authors own description as follows:

"The ilio-femoral ligament has been usually described as reinforcing the capsule by a single fibrous band extending from the inferior iliac spine to the inner extremity of the anterior, intertrochanteric line, and playing no very important part in health or injury. Upon examination it will be found to take its origin from the anterior inferior spinous process of the ilium, and inserted fan-shaped into nearly the whole of the oblique spinal line, which connects the two trochanters in front,—being about half an inch wide at its upper or iliac origin, and but little less than two inches and a half wide at its fan-like femoral insertion. Here it is bifurcated, having two principal fasciculi; one being inserted into the upper extremity of the anterior intertrochanteric line, and the other into the lower part of the same line, about half an inch in front of the small trochanter. The ligament thus resembles an inverted Y, which suggests a short and convenient name for it."

"The Y ligament is of remarkable tenacity and strength, being at some points, when well developed, nearly a quarter of an inch in thickness, and forming an unyielding suspensory band, by which the femur, when in a state of extension, as in walking, is forcibly retained in its socket."

"In six, by no means recent subjects, taken by random from the dissecting tables and suspended by the shoulders, the lower limbs being united to the pelvis by the Y ligament alone, this ligament required for its rupture the attachments of weights to the foot, varying in several cases from two-hundred and fifty to seven hundred and fifty pounds."

Dr. Bigelow goes on to describe the several dislocations, showing the uniform influence that the Y ligament exerts upon each. And to make the work more practical he includes the following classification.

I. The regular dislocations, in which one or both branches of the Y ligament remain unbroken.

1. Dorsal.	Both branches entire.
2. Dorsal below the Tendon, (*ischiatic notch of Cooper*).	
3. Thyroid and downward.	
Oblique inward on the Thyroid foramen, or as far as the perinæum.	
Vertically downwards.	
Obliquely outward as far as the tuberosity.	
4. Pubic and sub-spinous.	
5. Anterior oblique.	
6. Supra-spinous.	*External branch broken.*
7. Everted Dorsal.	

II. The Irregular Dislocations, in which the Y ligament is wholly ruptured, and whose characteristic signs are therefore uncertain.

The author has produced upon the dead subject every variety of dislocation that has been recorded, and shows that they are all reducible. Under his classification all varieties are included, except the irreducible, which is omitted, probably because the author has not yet met with the dislocation.

While many of the different reductions are due to the small size of the aperture in the capsule, thus preventing the return of the head of the bone, he says: "any difficulty is easily obviated by carrying the head of the bone towards the opposite side of the socket, and thus enlarge the slit;" a simple manœuvre, easily accomplished by circumducting the flexed thigh across the abdomen, in a direction opposite to that in which it is desired to lead the head of the bone, which should be made in this way to pass across below the socket, and never, it is needless to say, above it, across the Y ligament.

In the two first, viz: "Dorsal" and "Dorsal below the Tendon," he makes the difference to consist in the amount of rupture, when there is much laceration of the parts, the head of the femur sweeps from the tuberosity of the ischium to hollow of the ilium. Thus he says: "I believe that no dislocation upon the ischiatic notch is worthy of the name,—that no satisfactory or practical result can be based upon this distinction alone, and it is also an error to suppose that during reduction, the femur ever notably slips into the sciatic notch, or that the sciatic notch ever offers any obstacle to its reduction." The description of each of the regular dislocations is clear and exhaustive; only requiring to be carefully read, to be comprehended.

The irregular dislocations, that is, "in which the Y ligament is wholly broken," also "dislocations and their reductions," and dislocations from hip disease, are next discussed, which furnishes the first part of the work.

He says the Y ligament may be ruptured, and the lower part of capsule remain comparatively sound. "But it has been shown that the position of the great majority of dislocations is determined by this ligament." When this ligament is ruptured, however, the limb does not assume equally constant positions and are consequently termed irregular. These luxations are to be reduced by traction, the head of the bone being guided into its place.

Of the reduction of old dislocations, Dr. Bigelow says, "so long as the socket was still excavated, and the bones were not deformed by osseous growths, I should feel quite confident of breaking any adhesions, lacerating the newly formed capsule, and replacing the bone, by the great power of the femoral shaft as a lever, and of the flexed leg in rotating the head of the bone around the main ligament. Cooper cites a case of dorsal dislocation, said to have been reduced after a lapse of five years, by a fall from a berth on shipboard."

The author thinks there might be great danger of breaking the femoral neck, especially if it has undergone fatty degeneration or atrophy from long disease.

Of "Dislocation from Hip Disease," Dr. Bigelow says, "the displacement is generally a sub-luxation, but it may sometimes be complete."

The second part of the work treats of "Fracture of the neck of the Femur" and "Fractures of the Pelvis." Dr. Bigelow thinks that imperfect fracture of the head of this bone, may be serious when it occurs late in life, but is by no means so when it occurs to a middle aged and healthy subject.

While we confess our inability to do justice to this important contribution to surgery, we will be perfectly satisfied with our attempt, if we only succeed in persuading every physician on the coast to procure the work and read it carefully and understandingly. We may safely say that no contribution to surgery, equally original and important, has appeared within our recollection.

To our fastidious friends, who like to see fine English editions on their shelves, we may say that this work, mechanically, is one of our well-known publisher's (Henry C. Lea) best efforts. The wood cuts, of which there are fifty-two, are equal to the fine wood-cuts that adorn the best English works.

The Physicians' Visiting List for 1870. Lindsay & Blackiston, Philadelphia.

A visiting list, we believe, is now generally regarded as an indispensable companion by most physicians. Lindsay & Blackiston's Visiting List is too well known to require description or recommendation. It commences its nineteenth year's service under the patronage of thousands of friends.

The Science and Art of Surgery, being a Treatise on Surgical Injuries, Diseases, and Operations. By JOHN ERIC ERICHSEN, Senior Surgeon to University College Hospital, and Professor of Clinical Surgery in University College, London. From the Fifth London Edition, with additions by John Ashhurst, Jr., A.M., M.D., Vice-President of the Philadelphia Pathological Society, etc., etc. Philadelphia, Henry C. Lea, 1869; pp. 1228. San Francisco, A. Roman & Co.

This fifth edition, the author tells us, has been remodelled, many of the wood-cuts re-drawn, and nearly a hundred new ones added. Some of the chapters have been almost entirely re-written, and much new matter added throughout the work. No pains, he tells us, have been spared to render this fifth edition worthy the continued confidence of the profession, by embodying in it the more important recent advances in the science of surgery.

Having at hand a copy of the third edition—London, 1861—we have carefully compared the two, and find that this fifth edition is in a great measure remodelled, many parts of it re-written, and considerable matter added to the text throughout the work. But we are sorry to find that, in our opinion, the value of the work is enhanced very little by the so-called improvement—perhaps more by the remodelling than by the additions and re-writing. We are disappointed in the work, and believe we have a right to be. It should contain the result of the latest researches in surgical pathology, and the improvements that have been introduced in the practice of the art since 1861—which it does not. In point of fact, were it not for the notes of the American editor, Dr. Ashhurst, this fifth edition would have contained no reference whatever to many of the important recent improvements that have been introduced into the practice of surgery since 1861.

In the very first chapter of this edition the reader must feel that the author has not done justice to that very important subject, viz.: the after-treatment of surgical wounds. Since the third edition was issued in 1861, Syme, Lister, Nelaton, Guèrin, Sir James Y. Simpson, and many others, have made many valuable practical improvements in the treatment of surgical wounds, which the author has ignored or neglected.

Of Chopart's operation on the foot, he says: "The result of this operation is extremely favorable, the patient, by the aid of a properly-constructed boot, being able to walk, and even dance, with very little appearance of lameness. In some cases, when the muscles of the calf are very strong, and the calcaneum projects, the heel becomes drawn up, and the centre edge of the stump made to point down in such a way that the patient is rendered lame by walking on the anterior, sharp edge of the calcaneum, which irritates the flap. This condition is best removed by division of the tendo Achillis." We would like to know what percentage of the persons that the author has subjected to Chopart's operation have been able, with a "properly-constructed boot, to walk, or even dance, with very little appearance of lameness"; and what percentage of those who were "rendered lame by walking on the anterior, sharp edge of the calcaneum," were benefited by "division of the tendo Achillis." It might also be interesting to know what percentage of his patients had to be subjected to a second operation by Symes' or Piragoff's method. If the experience of modern surgery, and of our artificial limb-makers, justify the author's remarks, then, of course, his eulogy of the operation is proper. If, however, as we believe, the result of Chopart's operation is anything but satisfactory, we would most respectfully suggest that text-books should cease to recommend certain courses of practice simply from force of habit or ancient precedent.

In his treatment of contused wounds, by poultices, the author is supported by time-honored practice; while, in his treatment of poisoned wounds, he, it would seem, has not read any of the very recent writers on the subject. This may be accounted for, probably, by the fact that he tells us "snake-bites are seldom fatal in England"; therefore the writings of Dr. Mitchell of Philadelphia, or Prof. Halford of Australia, which have lately attracted so much attention on this important matter, need not lumber the pages of a legitimate text-book.

We are inclined to believe that the author is merely repeating the dogmas of the fathers, and not giving us the result of his own experience, when he cautions us against the use of the ligature to veins. As for his remarks on "Tortion of Cut Arteries," they do very well for the third edition, eight years ago. But for the note by the American editor, the readers of this fifth edition would never be informed that the practice has been lately revived, and has occupied the attention of many of the ablest surgeons in Great Britain, who are ever endeavoring to advance the science and art of surgery.

In his treatment of fractures, we were rather astonished that the author should find the starch, still so much preferable to the glue, or Plaster of Paris bandages, but after reading his method of applying the glue and plaster, the reason appeared

obvious. Thanks to the American editor, we have a note giving the rational treatment of fractured ribs, viz: by applying strips of adhesive plaster to the injured side only. And as for fracture of the clavicle, we had supposed that the rational method of fastening the shoulders back, thus relieving the bone from all duty until it had united, had almost become universal. But the author treats us to a wood-cut, where the familiar old pad in the axilla is fastened *secundum artem.*

In the treatment of fractures of the thigh bone, the author informs us that "the double inclined plane is especially useful in many compound fractures of the thigh, often admitting of greater facilities for dressing the wound and the general management of the case, than any other apparatus that can be applied." Again "a simple comminuted fracture of the thigh-bone, is usually best treated in the double inclined plane, for the first three weeks, after which it may be put in a starch bandage." We supposed that medical students were being taught by the best teachers of the day; that the double inclined plane was particularly adapted to the treatment of fractures of the upper third of the femur, on account of the liability of the proximate end of the bone to be tilted up by the muscles.

Of dislocations he says that, "the great obstacle to reduction is, the tonic *contraction of the muscles*, and in the reduction of the dislocation, the surgeon's efforts are chiefly directed to overcome this contraction." "In the reduction of old dislocations, chloroform does not afford exactly the same kind of service as in those of recent date. In a recent dislocation the chief obstacle is muscular contraction, and by relaxing this, chloroform enables the surgeon to replace the bone at once without difficulty." Notwithstanding that the chloroform "enables the surgeon to replace the bone at once and without difficulty," when he comes to speak of dislocation of the hip he says, "the reduction of this form of dislocation is effected in the following manner: The patient having been put under the influence of chloroform, is laid on his back upon a strong table between two staples, one of which should be fixed to the floor and another at a point above the level of the body, in a direct line with the axis of the limbs, etc. In short he goes on with the time-honored description of reduction by pulleys, jack-towels, padded leather belts, etc. Having finished his description of this approved method of reducing the hip, we are told that dislocation on the dorsum ilii or sciatic notch, *may* be reduced by manipulation as introduced by Dr. Reid of New York.

For traumatic peritonitis, we are advised if the inflammation be of a sthenic form, to bleed freely from the arm, apply leeches abundantly to the abdomen, and give two grains of calomel and one grain of opium every sixth hour.

In the treatment of *cellulo cutaneous erysipelas*, the author informs us that the blood-letting is not required. To medical students who are being taught to treat scarlatina, diphtheria and erysipelas, with iron, quinine, brandy and beef tea, it will not seem surprising that the author does not find blood-letting necessary in erysipelas. It is also to be hoped that they will find the author's best plan of treatment equally unnecessary, viz: "give an emetic and purge to clear out the stomach and bowels." For the treatment of "*phlegmonous erysipelas of the head*, active antiphlogistic means," he says "are more frequently required than in the management of other forms of erysipelas."

As for the treatment of hip-joint disease, we have no hesitation in advising the young surgeon to look the matter up in some other surgery, or in some monograph on the subject. If however he have none at hand, to try his first case without the aid of that invaluable remedy calomel. Our object in making the above extracts is simply to show why we are disappointed with the work. We sincerely hope that the next edition of this valuable work, will receive a careful and thorough revision, and that while the author adds considerable to the text, he will not neglect to omit considerable. We believe that we have the sympathy of the profession, in stating that we are quite tired of being told, at the commencement of the treatment of nearly every disease, that blood-letting will be hardly necessary. And in scores of diseases that will get well in a short time if left alone, that they *may* be treated without mercury.

Electricity in its Relations to Practical Medicine. By Dr. Moritz Meyer, Royal Counsellor of Health, etc.; translated from the Third German Edition, with Notes and Additions. By William H. Hammond, M. D., Professor of Diseases of the Mind and Nervous System, and of Clinical Medicine in the Bellevue Hospital Medical College, etc., etc. D. Appleton & Company, New York, 1869; A. Roman & Co., San Francisco.

It is scarcely fourteen years since the first edition of this work appeared, and the fact that it has reached its third in so short a time would indicate that the profession is not only alive to the importance of the subject, but appreciates the manner in which the author has presented it in this volume.

The popularity of this work, over others on the same subject, is evidently due to its eminently practical character throughout. While other works on the subject are exhaustive, containing everything we require to know, they contain much that is of no interest to the general practitioner, which, however, he is compelled to read, in order to get what it is necessary to know. It is quite different with this work—the author seems to have culled everything that is of practical value from all the other writers on the subject, and present it, with his own original researches and observations, in the most practical manner possible. The author has not only availed himself of the writings of Duchenne, Benedikt, Drissen Rosenthal, Schultz, etc., but is familiar with the writings of all the principal writers on the subject—English and French, as well as German.

The volume is divided into nine sections. The first section is historical, which he divides into three periods, the first of which dates back some two thousand years, commencing with our knowledge of the electricity of the raja torpedo and ending with the practical use of the electrical machine and Leyden jars. From 1789 to 1831 comprises the second period; and from the latter to the present, the third. We are told that "the history of electro-therapeutics is the history of electricity."

The second section treats of the different forms—viz., friction, contact, and induction—electricity, or Franklinic, Galvanic, and Faradic; the third section, of the electro-motor properties of the animal body; the fourth, on the action of the electric current on the organs and tissues of the animal body; the fifth is a full description of the different apparatus which have been constructed for therapeutical purposes; the sixth describes the methods of using interrupted and constant currents; the seventh section treats of the practical application of electricity to anatomy, physiology, and pathology; also giving the results of Duchenne's investigations upon the various muscles. The eighth section is a consideration of the importance of electricity in the diagnosis and prognosis of paralytic affections; and the ninth treats of electricity as a curative agent, and describes at length its practical application to medicine, obstetrics, gynæcology and surgery.

Our Home Physician. By George M. Beard, A. M., M.D., Lecturer on Nervous Diseases in the University of New York, etc., etc. E. B. Treat & Co., New York, 1869.

In noticing the advance sheets of this, we stated that it was likely to be the best work of the kind yet offered to the people. On a second perusal of the text, our expectation of its value is more than realized. We believe that the surest way to protect the people from quack doctors and quack medicines is to place in their hands such books as this, which will teach them to protect themselves against disease. We are particularly pleased to see so large a portion of the work devoted to *hygiene, or the art of preserving health*, and take particular pleasure in recommending the careful study of this portion of the book to every person who has charge of a family. Inasmuch, however, as the work is not intended for the profession, we would rather have seen no mention made of such remedies as aconite, belladonna, elaterium, and all such dangerous drugs. If a person gets no relief from any of the more simple remedies, he had better try and find a responsible person to administer such poisonous ones.

CALIFORNIA ACADEMY OF SCIENCES.

The California Academy of Sciences held its regular semi-monthly meeting on Monday evening, November 1st. Mr. Yale presented a specimen of the tusk of a mammoth from Alaska, semi-fossilized; nearly fifty volumes and pamphlets from the Smithsonian Institute were received for the Library of the Academy, also four volumes of the American Conchology, bound. Mr. Yale called the attention of the Academy to the November meteoric showers, and stated that on the previous Friday evening he had noticed some.

Dr. Kellogg gave an account of his recent botanical trip, and exhibited a number of plants obtained, among them specimens of Œnothera Whitneyi, Whitney's Primrose, discovered by Prof. H. A. Bolander, and recently collected on the coast of Humboldt county by him. It was truly a beautiful annual and worthy memorial of the former President of this Society, and might well serve to awaken pleasant reminiscences of the very efficient chief of the late State Geological Survey. He also presented specimens of his huckleberry leaf-oak—Quercus Vaccinifolia—Kellogg, described many years since. The drawing of it made at the time, was brought before the Society again to verify its truthfulness to nature by comparison with specimen, and to correct an error, which by some mistake ascribes the name and description to Sir William Hooker. This had been considered by some as only a dwarfed form,—Q-Chrysolehis—a tree often from 40 to 50 feet high, and from 2 to 4 feet in diameter, with very wide spreading top, an evergreen and very valuable tough timber tree, quite equal to the live oak of the Atlantic States for ship-building; whereas, this is never more than from 2 to 4 or 6 feet high. If the intermediate forms ever run into this, he claimed that they should also have fruit on them, which was never the case. If this is to be considered a mere variety only dwarfed by locality, soil or altitude, then by a parity of reasoning the *Garrya Buxifolia—Gray*, which grows with it, should be considered only a dwarfed form of *G. Elliptica*. Yet there is no one that would contend for this.

Dr. Kellogg also exhibited specimens of *Brodiæa Coccinea —Gray*, and a painting, which was made by him a year previously to the description, and presented before the Academy, together with specimens of the plant, collected by Prof. H. A. Bolander. He found, during his recent botanical trip, a purple variety without the usual greenish border. They will be anxiously sought after by florists when better known. He also called the attention of the Academy to his "Chloragalum Angustifolium," figured in the proceedings of April 1st, 1861, vol. 2, page 104, and compared the figure and present specimens. He called attention to the impropriety of the name of *nudicaule* as applied to the scarlet larkspur showing very branching and leafy stems, and also stated that this plant hybernated during the dry season, the roots shrinking and apparently devoid of all life, which was restored by a return of moisture. He made a statement upon the value of a species of *Ceonothus*, in adding to the cream of milk when the plant was fed to cows, observing that land had been considered more valuable when covered with it. Dr. Cooper made the inquiry if any medicinal qualities had been noticed, and stated that in the Eastern States a species of this plant was used for tea, in the time of the American Revolution.

California Medical Gazette.

SAN FRANCISCO, DECEMBER, 1869.

☞ *All Letters and Communications to be addressed to the* "EDITORS CALIFORNIA MEDICAL GAZETTE, *care of A. Roman & Co., San Francisco.*"

NEW USES OF THE SPECULUM VAGINÆ.

It was hoped that the mania for the abuse of the speculum would, ere this, have subsided, and its use confined to the legitimate purposes of practical medicine; but, as journalists, it becomes our duty to chronicle new achievements for this instrument.

A medical friend being called in consultation, in a case of protracted labor, asked the attendant physician the nature of the presentation. "Oh," he replied, "the head is presenting." Doubting the fact, our friend asked him how he knew that the head presented? "*Why, I made an examination with the speculum, and saw the hair on the scalp.*" A female physician, on Howard street, has had an inspiration equally luminous, and, for the sake of the Medical Art as well as humanity, we give it to the profession. A lady who was suffering from acute vaginitis, had been under her treatment for ulceration of the cervix uteri. She afterward consulted a physician, whom she told that this woman had been *poulticing the uterus*, for several weeks, with flax-seed. With some incredulity, he asked how she did it. "*It was stuffed through a speculum*"!

At the risk of being thought irreverent, we cannot refrain from relating another application of the speculum, which could never have been contemplated by its inventor. A medical gentleman of this city, being in attendance upon a daughter of the Emerald Isle, during a protracted and difficult labor, gave his opinion, at length, that the application of the forceps would be advisable, the head of the fœtus being still above the brim of the pelvis. Fearing a fatal termination to the child, a clergyman was sent for by the friends, who desired to be left alone a few moments with the patient, but our friend claimed the right to be present, and remained to witness the following curious ceremony: An attendant introduced a tube, through which a syringe-full of water, in which the medical man had just washed his hands, was injected upon the head of the yet unborn child—with the usual ceremony of infant baptism. Query: Is not this what might be understood as being literally born a Christian?

THE CHANNING HOME, BOSTON.

To our friend the President of this Institution—James M. Barnard, Esq.—we are indebted for a report of the year's proceedings, ending April, 1869. Of its origin the report says:

The Channing Home had its origin, a few years since, in the benevolence of Miss Harriet Ryan, a young Roman Catholic of this city.

Moved by a profound compassion for the poor, sick women, particularly incurables, in their small and inconvenient dwellings, she determined to do what she could to relieve them. Her great desire was to provide a Home, where as many of those unfortunate persons as she could personally take care of could be properly treated, in a locality not very remote from their friends.

Many people think that, when a community provides a public hospital—and, perhaps, that a poor one—that they have done their whole duty to the suffering poor. It is not the case, however. Poor incurables, who may live for several years, will accumulate in every city hospital, and must be removed, from time to time, in order to make room for accidents and the more acute cases. We have often thought that one of the necessities of this city was a Home for Incurables, our Alms House being the only place for such cases. Being prejudiced against the name of Alms House, it had never suggested to our minds that it could be a *Home* to any one. We were happily disappointed, however, on visiting our Alms House a few weeks ago, with our friend Dr. Cole, in finding it in everything but name a Home. From the history we gathered of the institution, its inmates owe the home comforts that they enjoy, principally to the exertions of Dr. Cole. They have proper medical care, good food, and kind nursing. One cannot help but feel that here everything is being done that can be done to render the remainder of their earthly journey as pleasant and painless as possible.

We expected, for this number, a valuable contribution to our medical topography, in the form of a catalogue of the flora found in that part of California covered by Whitney's map of San Francisco and vicinity, but it has been found impracticable to prepare the entire article for this number, and we think it very desirable that it should be printed in one form for convenience of reference. Professor Bolander, who has undertaken the work, will confer a favor upon the public which far transcends our means of acknowledgment. There is no man so capable of doing this, by intimate acquaintance with this subject, and, probably, no man who has contributed so much by his own labors to a knowledge of the flora of California as Prof. Bolander,

since the time of Douglas, the first explorer in this field. It may be proper to state, for the information of many readers, that there has never been published a catalogue of our indigenous plants—the first step necessary to popularizing a knowledge of them.

Consumptives' Home.—The Consumptives' Home at Boston, which was established on September 28th, 1864, is an institution supported upon unusual principles. There is no fund-endowment or known pecuniary provision whatever existing for the support of the Home. No human friend has ever made any promise, express or implied, to sustain the institution, which is supported entirely by voluntary gifts obtained through *prayer*. The only means of soliciting money or aid in food, clothing, or any of the necessaries of life, have been the prayers of the founder and manager. The journal of this benevolent physician contains interesting accounts of the numerous occasions when the Home was reduced to the last extremity through the want of some particular article, and when that identical article was sent to the institution in answer to prayers for it. The Consumptives' Home was started with one house, but now occupies four buildings, the purchase-money for which was raised in answer to prayer. The last Report of the institution shows $50,328 has been given by friends during the last five years, and $20,105 during the past year. The Home has since its opening accommodated three hundred and thirty-one patients, and accommodated one hundred and sixty-five patients during the year ending September, 1869.—*Medical and Surgical Reporter.*

Prayers so effective ought surely to be directed to the recovery of the consumptives for whose benefit the "Home" was founded. It is gratifying to learn from so respectable authority that the good old days of miracles are dawning upon us once more.

Prof. Carr.—As our friend Prof. Carr is so well known to the scientific and literary men of the North-West, it affords us especial pleasure to make the following extract from the Chicago *Medical Journal.* The fact that the Professor is so highly appreciated in the North-West is, in our opinion, as complimentary to the North-West as it is to Prof. Carr.

"The University of California is especially to be congratulated on the appointment of Prof. Carr. Whilst we regret that any concurrence of circumstances removes him so far from our immediate association, we congratulate the new institution on the zeal and ability he will take to it. No better instructor graces the chair of any college on the Continent. The best wishes of all who know him will attend him wherever he goes. Personally, we fervently trust that when the University achieves the great success this appointment almost necessitates, there will not a new King arise who will not know Joseph (Ezra). This ignorance is often disastrous."

Vol. 1, No. 1, of the Oregon *Medical and Surgical Reporter* is before us. It is edited by E. R. Fiske, A.M., M.D., and published by the Medical Faculty of Willamette University. The editor believes that a medical journal in Oregon is essential to the interests of the profession in that State, and that his sole motive in attempting the enterprise is a desire to accomplish good. We sincerely hope that such motives will be rewarded with success. Unfortunately, merit is not always appreciated, otherwise we might predict with certainty a large circulation for our contemporary journal, from the highly scientific and practical nature of its original contributions.

Mrs. Winslow's Soothing Syrup.—We have to acknowledge the receipt of a communication from the proprietors of this article, saying that the analysis of Mrs. Winslow's Soothing Syrup, which appeared in the November number of this Gazette, "is false in every particular." We have only to say that the analysis was made by a competent chemist, and sent to us by a surgeon holding a high position in the United States Army. If the proprietors will send us an analysis from any competent chemist, we will give it space in the Gazette as cheerfully as we gave space to the analysis in question.

In reference to the original communication regarding the quack Borgio, we may say that we had no knowledge whatever of the individual; and, were it not that the writer is a gentleman for whom we have the greatest respect (and who is himself a Roman Catholic in faith), we would hardly have believed that the Roman Catholic clergy of Santa Clara would allow such an outrage to be perpetrated upon their people. We submitted the article, however, to a medical gentleman in that neighborhood, for whom we have the highest respect (and who is also a Roman Catholic), and his reply was that the half had not been told; that Borgio's ignorance could only be exceeded by his pretensions, and it was a mystery to him as well as to his medical brethren in the neighborhood why his superiors tolerated the outrage.

☞ *Readers of the* California Medical Gazette *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received and acknowledged under "Communications received."*

Chromic Acid is perhaps the best, and certainly the least painful of all caustics. It is extremely well adapted to destroy all morbid growths or excrescences. Not painful, and not liable to spread like most caustics, it has been successfully used to destroy cancroid excrescences on or near the *os uteri.—Canadian Phar. Journal.*

SURGERY.

ON CERTAIN CAUSES OF MAMMARY CANCER.

By CHARLES H. MOORE, F.R.C.S., Lecturer on Surgery; Surgeon to the Middlesex and St. Luke's Hospital.

In a paper formerly read to the Association at Leamington, I endeavored to distinguish the antecedents of cancer, according as they might reside in a general cause or in one belonging to the site of the primary tumor. There appeared to me reason to give greater prominence to those causes which act upon or within the misgrowing part itself, than to those which might belong to the whole body in common. The search for the causes of cancer became, therefore, more likely to be successful if prosecuted in the organ first diseased, than in peculiarities which, being undefinable, are designated constitutional. Causes, indeed, are peculiarly difficult to demonstrate in respect to any new growth. Their obscurity arises mainly from the fact that they influence the faulty textures gradually and imperceptibly. Like the forces evoking the development of organs, they are seen in their results; but they act, however energetically, without themselves attracting observation. Moreover, there is no one cause for all new growths. On the contrary, similar tumors appear to me to proceed from different causes, while the same cause, operating at one time, may issue in an innocent growth; at another, in a growth which is malignant.

In the instance of the female breast, which is, on various accounts, the organ most convenient for the study of tumors, there appear to be liabilities to new growths of all kinds from causes which cannot be included amongst those hitherto in question, whether they be local causes or causes innate. There is apparently a third source by which tumors arise out of a relationship of even distant organs to one another—a relationship which, as it normally associates the functions of those organs, is capable also of perverting them.

It is to illustrate this subject that the following brief paper is designed; and, especially, not so much to call attention to the frequency with which uterine or ovarian ailment precedes the development of mammary disease—a fact already familiar—as to suggest that some, even of the cancers of the breast, may be induced by such previous distal irritation.

Practitioners who have to observe the great prevalence of uterine disease, may possibly not deem it reasonable to attribute any of the tumors occurring in the breast to an irritation reflected from the generative organs in the pelvis, since the large majority of the cases which pass under their notice make complaint only of the uterus, and are not attentive to the less irksome ailment, when there is any, in the breast. Yet, as a matter of fact, mammary disease does so often arise with a relation to previous disturbance of the womb or ovary, as to impress a surgeon with the conviction that they are connected. The very track by which the mischief passes may even be indicated by an observation in Mr. Birkett's Treatise on the Breast, which shows that, in a patient having uterine disturbance, pressure on the nerves issuing from intercostal spaces on their way to a spot of chronic induration of the breast, is sometimes as painful as the swollen spot itself.

It is by no means uncommon to find dysmenorrhœa and leucorrhœa attended by tumefaction of the breasts. In young women having difficult menstruation, the induced disease may be a chronic mammary glandular tumor; at a later age, many of the acini of the gland may enlarge and become dense from the same cause, the breasts feeling beset, more or less generally throughout, with grains or nodules, some of which are as large as cherry-stones. When uterine symptoms are much protracted, irregular indurations of larger size appear, which are not confined to the acini, are unevenly dispersed in one or both breasts, and, if more prone to occur in one part than another, are rather frequent in the depth of the organ beneath the areola. Even these masses may subside upon the removal of the uterine ailment; but it may also happen (and this is the chief point to which I invite attention) that, though most of such apparently similar tumors disappear, yet one of them eventually becomes hard, enlarges, infects the axillary glands, gives rise to the growth of similar tumors outside the mamma itself, and, in fact, runs the course of unmistakable cancer.

Besides these, there are other cases of prolonged uterine or ovarian disease, during which there arises, unobserved, in one of the breasts, a tumor which is cancerous from the first. Without disregard to other causes of the same disease, this sequence is yet traceable often and markedly enough to suggest a connection between the genital and the mammary disease—a connection of cause and effect which, if recognized in the instance of chronic induration of the breast, may be allowed also in that of cancer. It is true that, on account of the opinion usually entertained respecting the nature of these two diseases, we hesitate to refer them to a common origin, the chronic induration being limited, transient, and rather inflammatory, the cancer being permanent and aggressive. Yet, as the study of new growths advances, even such differences more and more lose importance—not, indeed, as to the probable issue of the dissimilar diseases, but certainly, as it seems to me, in respect to their cause.

I proceed to give brief and selected evidence of the opinions thus advanced.

Several years ago my attention was first attracted to the subject by observing the large proportion of cases of mammary cancer in which fibrous tumors existed in the uterus; especially tumors small, pendulous, lying at the fundus, and liable to constant movement amongst the coils of the intestines. Further observations amongst the living have supplied such evidence as the following of the origin of mammary disease in uterine irritation:

Disordered Menstruation, Glandular Tumor, and Chronic Induration of the Mammæ.—Dr. Peregrine did me the favor to send to me an unmarried lady, on account of the state of her breasts. She began to menstruate at twelve years of age, and the discharge, which continued on every occasion for twelve days at a time, recurred regularly every three weeks. During her early womanhood, she was greatly exhausted by this sometimes copious depletion; but after some years she recovered strength, and became ordinarily stout. The catamenial discharge, however, continuing in excess, she had, at twenty-nine years of age, three tumors in the right breast—one of these was a soft movable glandular tumor, and superficial; the other two were deeply seated, indistinct, not hard, and as large as half-walnuts. They appeared to be inflammatory indurations of the breast tissue. In the left breast, many of the lobules were enlarged into dense, small, nodular swellings. Obviously, the whole disease was innocent, and, though taking three forms, was dependent on the state of the pelvic generative organs.

Enlargement and Induration of Lobules of the Left Mamma disappearing on the relief of Uterine Disease.—A lady of about forty, but apparently younger, was sent to me by Mr. Whipple, of Plymouth. She had several dense nodular swellings of the acini in the left mamma, and one firm, smooth, quoit-shaped, and mixed with the breast tissues behind the areola. In the axilla, on the same side, were four separate, firm, enlarged glands. The combination of axillary with the mammary tumors appeared to indicate that both were cancerous; but the history was very distinct that those in the breast were recent, while the axillary glands had been enlarged for seven years. There was considerable uterine discomfort and painful menstruation.

In the course of three months, during which a lotion of lead was worn on the breast, and the uterine symptoms were much relieved under the treatment of Dr. Barnes, the mammary swellings, and even the firm broad tumor behind the areola, disappeared. The axillary glands, however, enlarged a little in size and increased in number.

Large Uterine and Mammary Tumors, the former preceding.—An unmarried lady, aged thirty-four, consulted me for a very large fibro-plastic tumor in the left breast, there being also uterine tumors of much longer date than it, and so large as to deform the abdomen.

Obscure Ovarian Irritation — Chronic Induration and Doubtful Cancer of Mammæ, the former subsiding; Removal of one Breast.—Dr. Rowe, of Margate, sent a lady, aged forty-six, to me in November, 1867. She had tumors in the substance of both breasts—firm, flattened, movable only with the breast-tissue. Two of them were symmetrical, being behind the areola, but the nipples were not drawn in. There was no axillary disease on either side. The catamenia, usually moderate and punctual, were three weeks overdue; and, during this time, there had been a feeling of heat about the breasts, and uneasiness extending down the body to the region (which she pretty accurately described) of both ovaries. Though the tumors appeared to be cancerous, there was an evident connection between them and some reflected ovarian irritation.

Under treatment, all these swellings diminished, but at the same time the axillary glands on both sides became a little swelled. In June, 1869, Dr. Rowe found the left breast and both axillæ healthy; but, there being still a hard tumor on the right side, as a matter of precaution, he removed that breast. The tumor proved to be a dense, not schirrous, mass of mixed fibrous tissue, with nuclei.

I have since seen this lady, and satisfied myself that the entire disease in the remaining breast has disappeared.

Uterine Ailment, with Chronic Induration and Cancer in the Left Mamma.—Mr. Swindell, of Whetstone, brought to me an unmarried lady, aged thirty-four, having some moderately firm and apparently inflammatory indurations of parts of the right breast, with œdema. She had leuchorrhœa, and scanty and painful menstruation, and she was highly hysterical and over-sensitive. The engorgement of the breasts appeared to be due to the state of the pelvic organs, and it lessened under treatment. Fifteen months afterwards, though the hysterical and the uterine symptoms were relieved, and the general health had improved, one of the swellings became larger and hard, and the lymphatics were swollen. The breast being removed by my advice, but by another surgeon in one of the hospitals, the disease constituting the principal tumor proved to be scirrhous; and, at the present time, two and a half years later, there are cancerous nodules near the scar.

Cancer of the Breast, following long and severe Uterine Disease.—A middle-aged, somewhat hysterical lady, who had long had uterine disease, and undergone division of the cervix uteri on account of it, was brought to me with an elongated, hard tumor in the left breast. When first observed, but three months before, it was no larger than a walnut; it was now five inches by four inches in its principal diameter, and nearly two inches thick. The tumor, on the removal of the breast, was found to be an ordinary scirrhous, and there were some similar separate nodules in the adjoining healthy parts of the breast. In this case Dr. Routh distinguished uterine disease by the characters of the mammary tumor.

Protracted and severe Uterine Disease — Cancer of the Breast.—In a somewhat similar case, kindly referred to me by Mr. De Morgan, swelling and ulceration of the os uteri, with pain, began three months after marriage, and continued for fifteen years. During that time the lady was necessarily separated from her husband; and she underwent much treatment, having the cervix uteri slit, and the os wholly destroyed. At the end of that time there were swellings in both breasts, that in the left being an indistinct and apparently inflammatory thickening, while those in the right were scirrhous cancer, adherent both to the pectoral muscle and to the skin.

Several patients who had previously been under the care of Dr. Protheroe Smith, for uterine disease, were kindly referred to me by him, on the supervention of tumors in the mammæ; and in all of them, except those in whom operation was not advised, the diagnosis of cancer in the breast was confirmed. In one of these cases (a lady, aged fifty-six) there were tumors in both breasts, of which that on the left side only was cancer. The mammary tumor first attracted attention, and I took occasion to refer to Dr. Protheroe Smith the question of their originating in uterine disease. That gentleman ascertained, on examination, that there had long been discomfort and irksome, frequent micturition, and that the uterus was in a state of rather extreme and permanent flexion.

There appears to be reason to conclude that, however various other causes may be, whether of innocent or malignant tumors in the breast, yet uterine or ovarian ailment precedes, with an observable frequency, the development of some mammary disease; that this disease may occupy either breast, or both; that, in its natnre, it may be a transient, though chronic, induration of a segment of the breast, which may not be a strictly anatomical segment; that it may be a dense nodular enlargement of many of the lobules; that it may be an innocent glandular tumor; that mammary tumors, differing in construction, though alike in cause, may thus co-exist in the same person; that of concurrent tumors, not at first distinguishable from one another, some may subside on the abatement of the uterine symptoms, and one take the course of cancer; that mammary disease, following prolonged uterine ailment, may be cancer from the first.—*British Medical Journal.*

CASE OF RUPTURE OF THE LIVER AND KIDNEY FROM A BLOW.

M. Foley, æt. 30, was admitted to Bellevue Hospital on August 22d. He had been struck in the right side by a falling bucket of bricks, at 11 A. M., of the same day; was received two hours after the accident in a state of collapse, pulseless, blanched, lips blue and cold. He was suffering

great pain in the affected side, but had no mark of violence whatever. Two or three broken ribs discovered; all treatment was directed to his collapsed condition, warmth, stimulants, etc. He was perfectly sensible. Had no paralysis, and in short complaned of nothing but the pain in his side and exhaustion. He gradually sank and died August 23d., 2 A. M.

AUTOPSY NINE HOURS AFTER DEATH.

No marks of violence anywhere on the body; thoracic viscera normal; abdomen opened; extravasated blood in the substance of the omentum and beneath it; fluid blood in great quantity in the abdominal cavity; 7th, 8th and 9th ribs broken; the liver was found ruptured transversely through the right lobe, the fissure traversing its whole extent; from this other smaller fissures radiated into the left lobe; an immense bloody tumor was found on the right side, extending from the diaphragm to the cavity of the pelvis. The centre of this tumor was the *kidney*, ruptured into three distinct pieces, with several comminuted pieces; no marks of injury were found on the inner aspect of the abdominal or THORACIC walls.

THERAPEUTICS.

TREATMENT OF ANEURISM BY IODIDE OF POTASSIUM.

In Vol. I, p. 353, of the *Gazette*, we reported twelve cases successfully treated. In the *Edinburgh Medical Journal*, for July, 1869, Dr. Balfour, of the Edinburgh Royal Infirmary, adds eleven additional cases, and says that in all of them, there has been such a measure of success, as justifies him in saying this treatment holds out an excellent prospect of relief, and even of cure. He knows that spontaneous abatement occasionally takes place without any real improvement; but in all his cases, not only relief, but positive improvement was obtained in every instance. And he thinks that there are many facts which tend to prove that iodide of potash is not only curative in aneurism already developed, but that it also acts remedially and prophylactically in the aneurismal diathesis.

ANEURISM OF THE AORTA.

CASE 1.—Had been under observation for twelve months; the aneurism was reduced under treatment to a dull thud in the second intercostal space, but no pain or uneasiness was complained of. The patient was able to tend shop.

CASE 2.—Aneurism of the abdominal aorta had remained quite well for more than a year after treatment.

CASE 3.—Aneurism of the innominata, implicating the carotid and subclavian arteries. There was also an aneurism of the abdominal aorta, and a general aneurismal condition of the arteries. He remained comfortable for many months after treatment. His abdominal aneurism could be felt as a hard firm knot, much diminished in size; his innominate aneurism now never troubles him, but it is not absolutely consolidated, neither is it any longer a true aneurism; for it is restored to the condition of an elastic artery, enlarged fusiformly of course, but no longer bulging as it formerly did, as a pulsating globular tumor stretching across the trachea.

CASE 4—Was an aneurism of the aorta in a man aged 46. There was a large pulsating tumor to the right of the sternum, extending from the 3d to the 7th rib, and projecting fully one inch and a half above the level of the ribs. Part of the tumor was solid; but all below the centre was soft and pulsated fluidly. The dullness extended fully five inches all around the centre of the tumor. He had intense dyspnœa amounting to orthopnœa, violent harassing dry cough.

His food and drink were restricted in quantity: a belladonna plaster was put over tumor; 15 minims of chlorodyne were given every half hour to quiet his cough, and one tablespoonful of a solution of one-half oz. of iodide of potash in six ounces of infusion of chiratæ, was given in tablespoonful dose, three times a day. The patient was relieved in forty-eight hours and much improved in two months; the cough became very troublesome from time to time, but was relieved by the following prescription:

Morphiæ hydrochlor.	gr j
Acid hydrochlor. dilut.	m v
Acid hydrocyan.	ʒ ss
Syrupi Scillæ.	℥ i
Aquæ font.	℥ i

Given in teaspoonful doses every two or three hours.

Paralysis and loss of pulse in the left arm occurred and passed away. A violent serous diarrhœa was relieved by acetate of lead and opium in small doses, without stopping the use of the iodide.

After five months' treatment the improvement was quite remarkable. The pulsation was very much lessened; the tumor was perfectly solid in every part and visibly decreased in size. The patient was still kept in bed and the iodide of potash treatment still continued, in hope of seeing the complete disappearance of this large tumor. But the patient obtained liquor on the sly, and relapsed; still at the end of nine months the tumor was considerably diminished in size, the cough was all gone, and the patient, although emaciated to a skeleton, was able to walk out daily.

CASE 5—Was one of aneurismal dilatation of the aorta. The patient (aged) had suffered for 16 months with severe pain across the upper part of sternum, and breathlessness. There was dullness on percussion across the whole of the upper part of the breast bone. There was a pulsating tumor deep in the tracheal fossa, and a double bruit, extending up into the left carotid. Six drachms of iodide of potash were dissolved in six ounces of infusion of chiratæ, and a tablespoonful given three times a day. The patient was kept in bed, and his food and drink restricted. He was quickly relieved; and in a fortnight the rasping bruit was softened, and the pulsation much lessened.

CASE 6—Was one of aneurism of the aorta, which taken singly would attract much attention, but is remarkable as one of a series.

The patient, aged forty, had suffered for twelve months with a severe and constant aching pain in the chest. His breath was short and wheezing; cough troublesome, choking feeling on stooping, difficulty in swallowing solid food, pulse at left wrist almost imperceptible. There was a distinct bulging on the upper part of the left side of the chest, most marked over the second rib, and second inter-costal space, also decided impulse, and dullness from the clavicle to within two inches of the nipple, over which a double blowing murmur was to be heard. There was also enlargement of the heart and valvular disease. Pain and sense of choking prevented the patient from sleeping. Two drachms of iodide of potash were dissolved in six ounces of water, and two tablespoonfuls given three times a day, with chlorodyne ether, morphine injections, etc., to relieve the cough.

In the course of six months, after much suffering from pain and cough, he was materially better, the breathing was easier, cough and expectoration almost gone; but slight fatigue or exposure to cold would bring them back again, and at one time there was complete loss of pulse in the left arm, with coldness and excruciating pain, the expectoration became copious, purulent and bloody. He recovered from this, and during the whole of the next nine months continued to take two drachms of the iodide daily, with the exception of twice, when it caused pain, vomiting and gastric irritation.

It was not till the end of eighteen months that the tumor seemed sufficiently consolidated to allow the patient to get out of bed; and then, although he looked well and healthy, one drachm of iodide of iron was added to his medicine. There was great dullness on percussion of the chest, the sternal ends of both clavicles were dislocated, there was considerable puffiness and enlargement of the veins of the chest, a solid mass could be felt in the tracheal fossa behind the sternum, over the left subclavian there was a solid tumor, pulsating not very forcibly, and only with a movement of elevation, but more of dilatation, over which no bruit could be heard, but only a dull thud. The patient had no difficulty of breathing or swallowing, could go up and down stairs and walk about, no cough, and aneurism evidently consolidated or consolidating. Dr. Bennett was also satisfied with the reality of the improvement.

Case 7.—Aneurism of the aorta in a man aged twenty-two, had lasted nine months, attended with harassing cough and copious purulent expectoration, severe pains in left side of chest and neck and in left arm. Pulse 110, heart normal; between second and third left ribs there was a conical elevation one inch and a half long, rising half an inch above the level of the ribs, pulsating fluidly, with thin walls, and a distensile action. Dullness on percussion, extended from the first rib down toward the sternum, and over this space a pulsatile wave passed from right to left, attended with a tolerably loud and well-marked bruit.

The belladonna plaster, morphine mixture, and iodide of potash, one drachm to the ounce of water, was used in one-half ounce doses, *i. e.*, thirty grains per dose, three times a day. The pain ceased in a few days, in a month the cough was all gone, his breathing easy, and he comfortable. In a month more the cough and expectoration had entirely ceased and the patient thought himself cured. But the pulsating tumor, although lessened in size, had not thickened in its walls, and the bruit was as loud as ever. He left the hospital and relapsed; in a month cough became harassing and he expectorated fifteen ounces of purulent matter in one night. He required ten minims of chlorodyne to keep him from vomiting the iodide, but in six weeks more his cough and expectoration was all gone, he was looking well and gaining flesh, and the pulsations were quieter. At the end of four months the pulsations were so quiet, and the walls felt so solid and dense that he was able to leave the hospital.

Case 8—Was rather a case of disease of the aortic valves, attended with violent palpitation, severe pain over the heart, difficulty of breathing, with feeling of suffocation on walking or going up stairs, all of which were relieved in a month by one-half drachm doses of the iodide three times a day.

MORTUARY REPORT OF SAN FRANCISCO FOR THE THIRD QUARTER, ENDING SEPTEMBER, 1869.

CAUSES OF DEATH.

Abscess Lumbar	1	Gastritis	3
Abscess of Liver	1	Gastro Enteritis	7
Addison's Disease	1	Gangrene	1
Aneurism	1	Gangrena Senilis	1
do. of Aorta	5	Gangrene of Lungs	1
Alcoholism	1	Gunshot Wound	1
Anasarca	2	Hematemesis	1
Anemia	5	Hepatitis	6
Apoplexy	10	Hemoptysis	5
Angina Pectoris	1	Hysteritis	2
Ascites	8	Hydrocephalus	21
Asthma	1	Hydrothorax	6
Atelectasis Pulmonary	2	Hypertrophy of Heart	4
Atrophia	2	Inanition	27
Bright's Disease	13	Injuries, Unspecified	11
Bronchitis	3	Induration of Liver	1
Burns	4	Jaundice	5
Cancer	1	Laryngophthisis	1
do. of Breast	3	Laryngitis	1
do. of Stomach	6	Leprosy	1
do. of Uterus	2	Malformation Congenital	1
do. Intestine	1	Malformation	1
do. of Liver	1	Marasmus	45
do. Brain	1	Meningitis Tubercular	3
do. Pancreas	1	Measles	5
Childbirth	3	Meningitis	25
Chlorosis	2	do. Cerebro, Spinal	3
Cholera Infantum	28	Metrorrhagia	1
do. Morbus	4	Nervous Prostration	2
Cirrhosis of Liver	4	Old Age	3
Congestion of Brain	9	Œdema Glottidis	2
do. of Lungs	4	Paralysis	5
Convulsions	31	Peritonitis	8
Convulsions Infantile	4	Phthisis	95
Croup	10	Pneumonitis	30
Cyanosis	4	Premature Birth	4
Cynache Maligna	1	Pyemia	2
Cystitis	2	Purpura	1
Debility, General	7	Pustule Malignant	1
Delirium Tremens	8	Rheumatism	2
Dentition	5	Rupture of Intestine	1
Diarrhea	9	Scrofula	1
Difficult Birth	3	Softening of Brain	5
Diabetes	1	Spina Bifida	2
Diphtheria	21	Splenitis	1
Diseases of Heart	36	Suffocation	1
do. of Liver	1	Sunstroke	1
Drowning	5	Suicide	15
Duodenitis, Chronic	1	Syphilis	8
Dysentery	12	Tetanus	2
Dyspepsia	2	do. Traumatic	1
Embolia	1	Tumor of Brain	1
Enteritis	14	do. Malignant	1
Fever	1	Ulceration of Bowels	1
do. Puerperal	2	do. of Stomach	2
do. Remittent	2	Unknown	7
do. Scarlet	70	Uremia	2
do. Typhoid	15	Variola	1
do. Typhus	7	Whooping Cough	16
do. Intermittent	1		
Fracture of Skull	8	Total	831
Gastrodynia	1		

Stillbirths.....17

AGES.

Under 1 year	208	do 50 to 60 years	52
From 1 to 2 years	83	do 60 to 70 years	20
do 2 to 5 years	80	do 70 to 80 years	6
do 5 to 10 years	48	do 80 to 90 years	1
do 10 to 15 years	8	do 90 to 100 years	2
do 15 to 20 years	10	Unknown	2
do 20 to 30 years	88		
do 30 to 40 years	25	Total	831
do 40 to 50 years	98		

SEX.

Male	505	Female	326

COLOR.

White	781	Black	10
Copper	40		

NATIVITIES.

California	363	Bavaria	8
Other parts of U. S.	131	Russia	1
British American Provinces	11	Poland	2
Mexico	6	Sweden	6
Central America	3	Switzerland	3
England	28	Italy	3
Ireland	116	Greece	1
Scotland	10	Norway	3
Wales	2	Azores	1
France	21	West Indies	5
Germany	29	China	40
Prussia	10	Australia	2
Austria	3	Unknown	8
South American	1	Portugal	2
Spain	1	Hungary	1
Hanover	1	Jerusalem	1
New South Wales	1	At Sea	1
Denmark	2	East Indies	1
Belgium	1		
Holland	4	Total	831

RECAPITULATION.

Died in City Wards	612	Home of Inebriates	3
City and County Hospital	63	Alms House	7
U. S. Marine do	9	St. Vincent de Paul Asylum	4
French do	12	Casualties	29
German do	15	Suicides	15
Small-pox do	1	Female Hospital	1
St. Mary's do	29		
St. Joseph's Infirmary	31	Total	831

A CATALOGUE

OF THE

PLANTS GROWING IN THE VICINITY OF SAN FRANCISCO.

By H. N. BOLANDER, late State Botanist.

This catalogue contains the names of very nearly all the phaenogamous and cryptogamous plants found about a hundred miles north and south of San Francisco, and as far east as Mount Diablo. Some plants were omitted (especially the shrubby oaks) since it was impossible to determine their proper specific names. The two important families, the Fungi and Algæ have been entirely omitted; no one as far as I know, has made them a subject of investigation and study on this coast. The ferns, mosses, liverworts and lichens were studied by the very best authorities in America.

I take great pleasure in stating that our resident botanists, Dr. A. Kellogg and G. H. Bloomer, have largely assisted me in this undertaking, in fact, this catalogue is rather the result of our conjoint labors.

Neither the time of flowering has been mentioned, being so nearly alike for all, nor the underlying rock, since we have also in this respect so great a uniformity. The common metamorphic sandstone underlies nearly the whole region, except a few small patches of limestone and bituminous slate near Pescadero and Monterey. The influence of the underlying rock is apparently of less note, than the mechanical and physical properties of the subsoil and the distance from the ocean. From the ocean to Mount Diablo, one easily distinguishes three distinct floral regions; the immediate coast, the redwood and the parklands. Every one of these floral regions has its peculiar types and forms. Having no text book on our Flora, this catalogue may be of some service to those who are interested in the study of botany.

Ranunculaceæ.

LATIN NAMES.	ENGLISH NAMES.	NATURAL HABITAT.
Clematis, L.,	Virgin's Bower.	
C. lasiantha, Nutt.,		River banks
C. ligusticifolia, Benth.,		
Anemone, L.,	Windflower.	
A. nemorosa, L., var.,		Redwood
Thalictrum, Tourn.,	Meadow-Rue.	
Th. Fendleri, Englm.,		Meadows
Th. dioicum, L.,		
Ranunculus, L.,	Buttercup	
R. aquatilis, L.,		Ponds
R. Californicus, Benth.		Meadows
R. repens, L.,		"
R. hebecarpus, Hook & Arn.,		Around Shrubs
R. muricatus, L.,		Streets of S. F.
R. acris, L.,		Meadows
R. reptans, L.,		"
Myosurus, Dill.,	Mouse-Tail.	
M. minimus, L.,		Sandy Places
Aquilegia, Tourn.,	Columbine.	
A. Californica, Gray,		Meadows and Hedges

Latin Names.	English Names.	Natural Habitat.
Delphinium, Tourn.,	Larkspur.	
D. Californicum, Torr and Gray.,		Meadows
D. Menziesii, D. C.,		Hillsides
D. patens, Benth.,		"
D. simplex, Dougl.,		"
D. varigatum, Torr & Gray.,		Hillsides
D. decorum, Fisch. & Mey.,		Plains
D. nudicaule, Torr. & Gray.,	Yellow Larkspur.	Gravelly Places
Actæa, L.,	Baneberry.	
A. spicata, L., var arguta.,		Redwoods

Berberidaceæ.

Berberis, L.,	Barberry.	
B. aquifolium, Pursh.,		Hillsides
B. pinnata, Lag.,		
Vancouveria, Dcne.,		
V. hexandra, Morr & Dee.,		Redwoods
Achlys, D. C.,		
A. triphylla, Hook.,		Redwoods

Nymphæaceæ. (*Water Lily Fam.*)

Brasenia, Schrebr.,	Water Shield.	
B. peltata, Pursh.		Clear Lake
Nuphar, Smith.,	Pond Lily.	
N. advena., Ait.,	Yellow Pond Lily.	Ponds

Papaveraceæ. (*Poppy Fam.*)

Eschscholtzia, Cham.		
E. Californica, Cham.,	Calif. Poppy.	Meadows
E. cæspitosa, Lindl.		"
Dendromecon, Benth.,		
D. rigidum, Benth.		Dry Hillsides
Meconopsis, Vig.		
M. heterophylla, Benth.		Thickets
Platystemon, Benth.,		
P. Californicum, Benth.,		Sandy Soil
Platystigma, Benth.,		
P. lineare, Benth.,		Sandy Soil
P. Californicum Torr, (Meconella)		Mission Hills

Fumariaceæ. (*Fumitory Fam.*)

Dicentra, Bork.,	Dutchman's Breeches.	
D. formosa, D. C.,		Shady Places
D. chrysantha, Hook.,		Dry Hillsides

Cruciferæ. (*Mustard Fam.*)

Cheiranthus, R. Br.,		
Ch. capitatus, Dougl.,		Sandy Soil
Nasturtium, R. Br.,	Water Cress.	
N. officinale, R. Br.,		Springy Places
N. curvisiliqua, Nutt.,		Sandy Soil.
Barbarea, R. Br.,	Winter Cress.	
B. vulgaris, R. B.,		Meadows

Latin Names.	English Names.	Natural Habitat.
Streptanthus., Nutt.,		
H. Breweri, Gray.,		Monte del Diablo
H. glandulosus, Hook.,		Sandy Places
H. hispidus, Gray		Monte del Diablo
H. flavescens, Hook.,		Hillsides
H. procerus, Brewer.,		Sandy Soil
Turritis, Dill.,	Tower Mustard	
T. perfoliata, Lam., (T. glabra L.,)		Meadows
Arabis, L.,	Rock Cress.	
A. blepharophylla, Hook and Arn.,		Mission Hills
A. arcuatus, Nutt.,		Rocks
Cardamine, L.,	Bitter Cress.	
C. angulata, Hook.,		Meadows
C. oligosperma, Nutt.,		Meadows
C. paucisecta, Beuth.,		Redwoods
C. hirsuta, L. var.,		
Sisymbrium, L.,	Hedge Mustard.	
S. officinale, Scop.,		Fields
S. deflexum, Harvey.,		Hillsides
S. pygmaeum, Nutt.,		Hillsides
S. canescens, Nutt.,		Hillsides
Erysimum, L.,	Treacle Mustard.	
E. asperum, D. C.,		Fields
E. Arkansanum, Nutt.,		
Brassica, Tourn.		
B. alba, L.,	White Mustard.	Fields
B. nigra, L.,	Black Mustard.	
Senebiera, Poir.,	Wart Cress.	
S. didyma, Pers.,		Banks
Lepedium, R. Br.,	Pepper-grass.	
L. Menziesii, D. C.,		Fields
L. Californicum, Nutt.,		Fields
L. nitidum, Nutt.		
L. oxycarpum, Torr and Gray		Oakland Hills
L. latipes, Hook.		
Capsella, Vent.,.	Shepherd's Purse.	
C. Bursa-Pastoris, Moench.,		Fields
Thysanocarpus, Hook.		
Th. elegans, Fisch and Mey.,		Meadows
Th. radians, Benth.,		Meadows
Th. oblongifolius, Nutt.		
Th. pulchellus, Fisch and Mey.		
Th. pusillus, Hook.,		Hillsides
Raphanus, L.,	Radish.	
R. raphanistrum, L.,		Fields

Violaceæ. (*Violet Family.*)

Viola, L.		
V. canina, Rich.,	Blue Violet.	Moist Places
V. Nuttallii, Pursh.,		Gravelly Hillsides
V. pedunculata, Gray and Torr.,	Yellow Violet.	Mission Hills
V. glabella, Nutt.,		Redwoods
V. ocellata, Torr and Gray., (Canadensis ?)		Redwoods
V. sarmentosa, Dougl.,		Redwoods

Latin Names.	English Names.	Natural Habitat.
V. chrysantha, Hook,		Clay Soil
V. lobata, Benth.,		Woods
Cistaceæ. (*Rock-Rose Family.*)		
Helianthemum, Tour.,	Rock-rose	
H. scoparium, Nutt.,		Hillsides
Hypericaceæ. (*St. John's Wort Family.*)		
Hypericum, L.,	St. John's Wort.	
H. anagalloides, Cham. Schl.,		Moist places.
H. Scouleri. Hook.,		Banks.
Caryophyllaceæ. (*Pink Family.*)		
Silene, L.,	Catchfly.	
S. Californica, Durand,		Hillsides
S. Drummondii, Hook.		
S. Bolanderi, Gray.		Open woods.
S. Antirrhina, L..		
S. Gallica, L.,		Fields.
S. quinquevulnera, L.		
S. Douglasii, Hook.		
Arenaria, L.,	Sandwort.	
A. Douglasii, Fenzl.,		Sandy soil.
A. Californica, Brew.		
A. tenella, Nutt.		
Stellaria, L.,	Chickweed.	
H. media, Smith.	Common Chickweed,	Fields.
H. crassifolia, Ehrh.		
H. littoralis. Torr and Gray.		
Cerastium, L.,	Mouse-ear Chickweed.	
C. oblongifolium, Torr,		Banks.
Sagina, L.,	Pearlwort	
S. procumbens, L.,		Damp places.
Spergularia, Pers.,	Sand Spurrey.	
S. rubra, Presl.,		Low places.
Spergula, L.,	Spurrey.	
S. arvensis, L.,	Corn Spurrey,	Fields.
Paronychia, Tourn.,	Whitlow Wort.	
P. ramosissima, D. C.		
Portulacaceæ. (*Purslane Family.*)		
Calandrinia, H., B. and K.		
C. Menziesii, Hook.,		Meadows.
Claytonia, L.,	Spring Beauty.	
C. perfoliata, Don.,		Fields and thickets.
C. exigua, Torr and Gray.		
C. Siberica, L.,		Wet places.
A. aquatica, Nutt.,		Swamps.
C. parvifolia, Mocino.		
C. Menziesii. (?)		
C. linearis, Dougl.,		Wet places.
Montia, L.,		
M. fontana, L.,		In water.

Latin Names.	English Names.	Natural Habitat.
Lewisia, Pursh.		
L. rediviva, Pursh.,		Rocky places.
Spraguea, Torr.		
S. umbellata, Torr.,		Sandy soil.

Malvaceæ. (*Mallow Family.*)

Malva, L.,	Mallow.	
M. rotundifolia, L.,	Common Mallow,	Fields.
Sidalcea, Gray.		
S. malvaeflora, Gray.,		Meadows.
S. diploscypha, Gray,		Grain fields.
S. vitæfolia, Gray,		Borders.
Malvastrum, Gray,	False Mallow.	
M. Marrubioides,		Gravelly bottoms.
M. Munroanum, Gray,		Hillsides.
Fremontia, Torr.		
F. Californica, Torr,		Hillsides.
Lavatera, L.		
L. assurgentiflora, Kellogg.,		San Francisco.

Linaceæ. (*Flax Family.*)

Linum, L.,	Flax.	
L. congestum, Gray,		Meadows.
L. Breweri, Gray,		Diablo.
L. spergulinum, Gray,		Hillsides.
L. perenne, L.,		Waste places.

Geraniaceæ. (*Geranium Family.*)

Geranium, L.,	Cranesbill.	
G. Carolinanum, L.,		Meadows.
G. cæspitosum, (?) James,		Sandy fields.
Erodium L'Her.,	Storksbill.	
E. cicutarium L'Her,	Alfileria.	Meadows.
Limnanthes, R. Br.		
L. rosea, Benth.,		Moist meadows.
L. Douglasii, R. Br.,		Moist meadows.
Oxalis. L.,	Wood Sorrel.	
O. Oregana, Nutt.,		Redwoods.
O. stricta, L.,	Yellow Wood Sorrel,	Fields.
O. corniculata, L.,		Fields.

Rutaceæ. (*Rue Family.*)

Ptelea, L.		
P. trifoliata, L.,	Hop Tree,	Banks.

Anacardiaceæ. (*Cashew Family.*)

Rhus, L.,	Sumach.	
R. diversiloba, Torr and Gray,	Poison Oak,	Fields.

Vitaceæ. (*Vine Family.*)

Vitis, Tourn.		
V. Californica, Benth.,	Wild Grape	Thickets.

Latin Names.	English Names.	Natural Habitat.
Rhamnaceæ. (*Buckthorn Family.*)		
Frangula, Tourn.,	Alder Buckthorn.	
F. Californica Gray,		Thickets.
Rhamnus, L.,	Buckthorn.	
Rh. croceus, Nutt.,		Thickets.
Rh. Purshianus, Hook,		Damp woods.
Ceanothus, L.,	Red Root.	
C. incanus, Torr. and Gray,		Banks.
C. thrysoflorus (Esch.),	California Lilac,	Thickets.
C. divaricatus, Nutt.,		Thickets.
C. rigidus, Nutt.,		Hillsides.
C. dentatus, Torr. and Gray,		Hills.
C. papillosus, Torr. and Gray,		Mountains.
C. crassifolus var glabratus, Gray,		Banks.
C. integerrimus, Hook,		Woods.
C. velutinus, Hook,		Woods.
Celastraceæ. (*Staff-tree Family.*)		
Euonymus, Tourn.		
Eu. occidentalis, Nutt.,	Spindle Tree,	Moist thickets.
Sapindaceæ. (*Soap-berry Family.*)		
Aesculus, L.,	Buckeye.	
A. Californica, Nutt.,	California Buckeye,	Hillsides.
Acer, L.,	Maple.	
A. macrophyllum, Pursh.,	Large-leaved Maple,	Banks.
A. glabrum, Torr.,		Mountains.
Negundo, Moench.,	Box Elder.	
N. aceroides, Moench.,		River banks.
Ficoideæ.		
Mesembryanthanum.		
M. dimidiatum, Harv.,		Seashore.
Frankeniaceæ.		
Frankenia, L.		
F. grandifolia, Cham.,		Salt marshes.
Polygalaceæ. (*Milkwort Family.*)		
Polygala, Tourn.		
P. Nutkana, Moc. & Sessi,		Hillsides.
Leguminosæ. (*Pulse Family.*)		
Lupinus, L.,	Lupine.	
L. densiflorus, Benth..		Hillsides.
L. hirsutissimus, Benth.,		Dry places.
L. manus, Dougl.,		Fields.
L. truncatus, Nutt.,		
L. micranthus, Dougl.,		Gravelly places.
L. bicolor, Lindl.,		Shady places.
L. polyphyllus, Lindl.,		Wet places.
L. latifolius, Agardh.		Meadows.
L. affinis, Agardh.		

Latin Names.	English Names.	Natural Habitat.
L. ornatus, Dougl.,		Fields.
L. albicaulus, Dougl.,		
L. albifrons, Benth.,		Sandy places.
L. littoralis, Dougl.,		Rocky seashore.
L. arboreus, Sims,	Large Yellow Lupine,	Moist places.
Trifolium, L.,	Clover.	
T. eriocephalum, Nutt.,		Dry hillsides.
T. Macræi, Hook.,		Meadows.
T. gracilentum, Torr. and Gray,		Roadsides.
T. microcephalum, Pursh.,		Meadows.
T. variegatum, Nutt.,		Meadows.
T. fimbriatum, Lindl.		
T. heterodon, Torr. and Gray,		Moist places.
T. tridentatum, Lindl.		
T. fucatum, Lindl.,		Moist places.
T. amplectens, Torr. and Gray,		Hillsides.
T. ciliolatum, Benth.,		Hillsides.
T. dichotomum, Hook.		
T. bifidum, Gray,		Hillsides.
T. microdon, Hook and Arn.,		Hillsides.
T. barbigerum, Torr and Gray,		Meadows.
T. depauperatum, Desv.,		Meadows.
T. obtusifolium, Hook.,		Moist places.
T. spinulosum, Dougl.,		Hillsides.
T. repens,	White Clover,	Meadows.
Melilotus, Juss.,	Sweet Clover.	
M. parviflora, Desf.,		Meadows.
Medicago, L.,	Medick.	
M. sativa, L.,		Meadows.
M. denticulata, Wild,		Fields.
Hosackia, Dougl.		
H. juncea. Benth.,		
H. scoparia, Nutt.,		Hillsides.
H. cytisoides, Benth.,		Hillsides.
H. sericea, Benth.,		Hillsides.
H. tomentosa, Hook and Arn.,		Hillsides.
H. micrantha, Nutt.,		Roadsides.
H. prostata, Nutt.,		
H. rigida, Benth.		
H. stipularis, Benth.,		Thicket.
H. crassifolia, Benth.,		Woods.
H. gracilis, Benth.,		Moist places.
H. grandiflora, Benth.,		Woods.
H. maritima, Nutt.,		Seashore.
H. strigosa, Nutt.		
H. parviflora, Benth.,		Hillsides.
P. Purshiana, Benth.,		Meadows.
H. brachycarpa, Benth.		
H. bicolor, Dougl.,		Hillsides.
H. stolonifera, Lindl.,		River banks.
H. subpinnata, Torr. and Gray.,		Hillsides-
Psoralea, L.		
P. physodes, Dougl.,		Hillsides.

Latin Names.	English Names.	Natural Habitat.
P. orbicularis, Dougl.,		Thickets.
Thermopsis. R. Br.		
Th. macrophylla, Hook and Arn.,		Hillsides.
Astragalus, L.,	Milk Vetch.	
A. didymocarpus, Hook and Arn.,		Hillsides.
A. tener, Gray.,		Sandy fields.
A. Breweri, Gray,		Fields.
A. Douglasii, Torr. and Gray,		Coast.
A. Crotalariæ, Benth.		
A. Menziesii, Hook.,		Coast.
A. leucopsis, Torr. and Gray.,		Coast.
A. curtipes, Gray.,		Dry hills.
A. trychopodus, Nutt.,		Coast
A. oxyphysus, Gray.,		Dry hillsides.
A. picnostachius, Gray.,		Sea shore.
Lathyrus, L.,	Vetchling.	
L. vestitus, Nutt.,		Thickets.
L. venosus, Muhl.		
L. Torreyi, Gray,		Thickets.
Vicia, Tourn.,	Vetch.	
V. gigantea, Hook.,		Banks
V. Oregana., Nutt., (truncata).		Thickets
Cercis, L.,	Judas Tree.	
C. occidentalis, Torr.,		Hillsides
Pickeringia, Nutt.		
P. montana, Nutt.,		Hillsides

Rosaceæ. (*Rose Family.*)

Cerasus, L.,	Cherry.	
C. ilicifolia, Nutt.,	Evergreen cherry.	Hillsides
C. Virginiana, L.,	Choke cherry.	Hillsides
Nuttallia, Torr and Gray.		
N. cerasiformis, Torr and Gray.,		Hillsides
Spiraea, L.,	Meadow Sweet.	
Sp. opulifolia, L.,	Nine Bark.	Banks
Sp. ariæfolia, Smith.,		Thickets
Cercocarpus, H. B. and K.		
C. parvifolius, Nutt.,		Hills and Banks
Acæna, L.		
A. pinnatifida, Hook and Arn.,		Meadows
Adenostoma, Hook and Arn.		
A. fasciculata, Hook and Arn.,	Chemisal.	Hillsides
Alchemilla, Tourn.,	Lady's Mantle.	
A. arvensis, Scop.,		Fields
Horkelia, Cham. and Schlecht.		
H. cuneata, Lindl.,		Fields
H. tenuiloba, Gray.		
H. fusca, Lindl.,		Low Places
Potentilla, L.,	Cinque Foil.	
P. anserina, L.,	Silver Weed.	Low Places
P. rivalis, Nutt.,		Wet Places
P. glandulosa, Lindl		Hillsides
Fragaria, Tourn.,	Strawberry.	

Latin Names.	English Names.	Natural Habitat.
F. vesca, L.,		Thickets
F. chilensis, Ehrh.,		Sandy places.
Rubus, Tourn.,	Bramble.	
Rosa, Tourn.,	Rose.	
R. Nutkanus, Mocino.,		Hillsides
R. Vitifolius, Cham. & Schlecht.,		Thickets
R. ursinus, Cham. & Schlecht.,		Thickets
R. macropetalus, Dougl.,		
R. spectabilis, Pursh.,	Salmon Berry.	Thickets on the Coast
R. occidentalis, L?		Redwoods
R. blanda, Ait.,		Banks
R. gymnocarpa, Nutt.,		Hillsides.
Pyrus, L.,	Pear.	
P. rivularis, Dougl.,		Banks
Amelanchier, Medic.,	June Berry.	
A. Canadensis, var. alnifolia.,		Hillsides
Photinia, Linde.,		
Ph. arbutifolia, Lindl.,		Hillsides

Calycanthaceæ.

Calycanthus, L.,	Sweet-scented Shrub.	
C. occidentalis, Hook.,		Banks.

Saxifragaceæ. (*Saxifrage Family,*)

Tribe I—Grossularieæ.

Ribes, L.,	Currant Gooseberry.	
R. sanguineum, Pursh.,		Hillsides.
R. divaricatum, Dougl.,		Banks.
R. subvestitum, Hook and Arn.,		Banks.
R. speciosum, Pursh.,		Woods.
R. Menziesii, Hook.,		Woods.

Tribe II—Hydrangieæ.

Philadelphus, L.,	Mock Orange or Syrinca.	
Ph. Californicus, Benth., (Lewisii Pursh.,?)		Moist thickets.

Tribe III—Saxifrageæ.

Saxifraga, L.,	Saxifrage.	
S. Virginiensis, Michx. var.,		Hillsides.
S. integrifolia, Hook.,		Rocks.
S. heterantha, Hook.,		Banks.
S. peltata, Benth.,		Mountain streams.
Tiarella, L.,	False Mitre Wort.	
T. unifoliata, Hook.,		Moist redwoods.
Tellima, Br.		
T. grandiflora, Dougl.,		Ravines.
T. heterophylla, Hook and Arn., (Lithophragma,)		Hillsides.
T. affinis, Gray.,	"	Hillsides.
T. Bolanderi, Gray,	"	Banks.
T. Cymbalaria, Torr. and Gray	"	Ravines.
Heuchera, L.,	Alum Root.	
H. micrantha, Dougl.,		Ravines.
H. pilosissima, Fisch and Mey.,		Coast.
Tolmiea, Torr. and Gray,		

Latin Names.	English Names.	Natural Habitat.
T. Menziesii, Torr. and Gray,		Ravines.
Whipplea, Torr.		
W. modesta, Torr.,		Redwoods.
Crassulaceæ. (*Orpine Family.*)		
Tillaea, L.		
T. leptopetala, Benth.,		Mission.
Sedum, Tourn.,	Stone Crop.	
S. spathulifolium, Hook.,		Rocks.
Echeveria, D. C., (Cotyledon.)		
E. lanceolata, Nutt.,		Rocks.
Lythraceæ. (*Loose-Strife Family.*)		
Lythrum, L.,	Loose-strife.	
L. Californicum, Torr. and Gray.,		Banks
Onagraceæ. (*Evening Primrose Family.*)		
Circaea, Tourn.,	Enchanter's Nightshade.	
C. Lutetiana, L.,		Moist places.
Epilobium, L.,	Willow Herb.	
E. angustifolium, L.,		Ravines.
E. tetragonum, L.,		Moist places.
E. minutum, Lindl.,		Hillsides.
E. paniculatum, Nutt., (?)		Hillsides.
Zauschneria, Presl.		
Z. Californica, Presl..		Hillsides.
Oenothera, L.,	Evening Primrose.	
Oe. viminea, Dougl.,		Banks.
Oe. purpurea, Curtis,		Hillsides.
Oe. densiflora, Lindl.,		Hillsides.
Oe. ovata, Nutt.,		Hillsides.
Oe. graciliflora, Hook.,		Dry fields.
Oe. viridesceus, Hook.,		Hillsides
Oe. contorta, Hook.,		Sandy fields.
Oe. Whitneyi, Gray..		Sea Coast.
Gayophytum, Juss.		
G. strictum, Gray.,		Dry hillsides.
Eucharidium, Fisch and Mey.		
Eu. concinnum, Fisch and Mey.,		Hillsides.
Haloragеæ.		
Hippuris, L.,	Mare's Tail.	
H. vulgaris, L.,		Ponds.
Callitriche, L.		
C, verna, L.,		Banks and Pools.
C. marginata, Torr.,		Banks.
Loasaceæ.		
Mentzelia, L.		
M. albicaulis, Dougl.,.		Dry river beds.
M. lævicaulis, Torr. and Gray.,		Dry fields.

Latin Names.	English Names.	Natural Habitat.
	Cucurbitaceæ.	
Megarrhiza, Torr. and Gray., (Echinocystis.)		
M. Oregana, Torr. and Gray.,	Big Root,	Fields.
	Umbelliferæ. (*Parsley Family.*)	
Hydrocotyle, Tourn.,	Water Pennywort.	
H. natans, Cyrillo,		Wet places.
H. interrupta, Muhl.,		Wet places.
H. Americana, L		Wet places.
Bowlesia, Ruiz and Pav.,		
B. lobata, Ruiz and Pav.,		Shady places.
Eryngium, L.		
E. petiolatum, Hook.,		Dry fields.
Sanicula, S.,	Saniele.	
S. Menziesii, L.,		Hillsides.
S. laciniata, Hook and Arn,,		Hillsides.
S. nudicaulis, Hook and Arn.,		Hillsides.
S. bipinnatifida, Dougl.,		Hillsides.
S. bipinnata, Hook and Arn.,		Hillsides.
S. arctopoides, Hook and Arn.,		Hillsides.
S. tuberosa, Gray.,		Dry hillsides.
Deweya, Torr. and Gray.		
D. arguta, Torr. and Gray.,		Hillsides.
D. Hartwegi, Gray.,		Hillsides.
D. Kelloggii, Gray.,.		Hillsides.
Musenum, Nutt.		
M. trachyspermum, Nutt.,		Dry shady hillsides
Apiastrum, Nutt.,		
A. angustifolium, Nutt.,		Banks.
Cicuta, L.,	Water Hemlock.	
C. Californica, Gray.,		Wet places.
Sium, L.,	Water Parsnip.	
S. latifolium, L.,		Wet places.
Carum. L.,	Caraway.	
C. Kelloggi' Gray.,		Dry hillsides.
Pimpinella, L.,		
P. apiodora, Gray.,		Hillsides, around rocks
Osmorhiza, Raf.,	Sweet Cicely.	
O. occidentalis, Nutt.,		Shady places
O. nuda, Torr.,		Woods
Myrrhiss, Scop.,		
M. Bolanderi, Gray.,		Banks
Ligisticum, L.,	Lovage.	
L. apifolium, Nutt.,		Hillsides
Angelica L.,	Angelica.	
A ep.?		Moist Banks.
Peucedanum, L.		
P. leiocarpum, Nutt.,		Hillsides.
P. nudicaule, Nutt.,		Hillsides.
P. tomentosum, Benth.,		Hillsides.
P. caruifolium, Torr. and Gray.,		Hillsides.
P. utriculatum, Nutt.,		Hillsides.

Latin Names.	English Names.	Natural Habitat.
P. parvifolium, Torr. and Gray.,		Pine woods.
P. foeniculaceum, Nutt.,		Pine woods.
Heracleum, L.,	Cow-parsnip.	
H. lanatum, D. C.,		Moist places.
Oenanthe, L.		
Oe. sarmentosa, Nutt.,		Ponds.
Daucus, Tourn.,	Carrot.	
D. pusillus, Michx.,		Dry Hillsides.
Caucalis, L.		
C. microcarpa, Hook. and Arn.		Open woods.

Araliaceæ. (*Ginseng Fam.*)

Aralia Tourn.,	Spikeware.	
A. racemosa, L.		Moist places.

Cornaceæ. (*Dogwood Fam.*)

Cornus Tourn.,	Dogwood.	
C. Canadensis, L.,	Dwarf, Cornel.	Coast.
C. Nuttallii, And.		Open woods.
C. pubescens, Nutt		Banks.
C. sericea, L.,	Silky Cornel.	Moist places.

Caprifoliaceæ. (*Honeysuckle Fam.*)

Lonicera, L.,	Honeysuckle.	
L. involucrata,	Bank's Twinberry.	Moist places.
L. Californica, Torr. & Gray.,		Hillsides.
Symphoricarpus, Dill.,	Snow berry.	
S. racemosus, Michx.,		Banks.
S. mollis, Nutt.,		Hillsides.
Sambucus, Tourn.,	Elder.	
S. pubens, Michx.,		Damp woods.
S. glauca, Nutt.		Hillsides.

Rubiaceæ. (*Madder Fam.*)

Galium, L.,	Cleavers.	
G. aparine, L.,		Thickets.
G. Californicum Hook.		
G. Andrewsii, Gray.		
Cephalanthus, L.,.	Button-bush.	
C. occidentalis, L.,		Banks.

Valaerinaceæ. (*Valerian Fam.*)

Plectritis.		
P. congesta, Lindl.,		Hillsides.
P. macrocera, Torr. and Gray.,		Hillsides.

[*To be Continued.*]

REPLY TO DR. SCOTT'S REPLY.

By C. F. Buckley, M. D., Etc.

So, after three months of solemn deliberation and harrassing doubt, his professional friends [?] have prevailed over Dr. Scott's simple and frank nature, and again he appears before the medical public, but in a somewhat altered character. The scientific community is enriched by another of his original productions—for the last effort is both original and unique—and it would be my duty to congratulate both counselors and counseled on the result of this labor, if the "author" had refrained from personalities and the imputation of improper motives as dictating my review. I have no desire to figure in a mere rhetorical fencing-match with Dr. Scott—for our efforts can scarcely be said to advance Uterine Surgery—because it is a waste of time, a travesty, if not an abolition, of the respect we owe one another, unworthy alike of men with more serious duties to perform, and of the pages of a journal devoted to Science; but I think the readers of the Gazette will excuse my obtruding myself on their notice again in connection with this matter, especially as my object this time is mainly to rid myself of very serious charges—such as "animus," and "dishonesty in quotation," which is implied in a remark of Dr. Scott's. "The whole gravamen" says he, "of the charge brought against me consists in the assertion 'that incisions are not only unnecessary but injurious in the flexions of the uterus'; while he (Dr. B.) at the same time admits their 'vast utility in strictures of the os in cases dysmenorrhœa and sterility,'" after which nearly a column is occupied with my "vagueness" and explanation of the acknowledged fact that stricture commonly depends on flexion. This is a mere shifting of the battle-ground—allowable strategy in war, but of very questionable propriety in a scientific discussion. First of all, I beg to remind Dr Scott that the whole gravamen of the charge—if he will so name it—is by no means what he alleges, as I shall endeavor to show farther on, and next that he quite alters the sense conveyed in my expression by misquotation. The passage referred to in print runs "but I fly not in the face of reason or authority and assert that this division of the cervix uteri is never necessary, nor do I for a moment deny its vast utility in the enucleation of intramural tumors, or in the treatment of *complete* stricture *accompanied* by dysmenorrhœa and sterility." I ask any intelligent reader of the English language whether Dr. Scott's quotation and my expression convey the same meaning? Let us, at least, have common honesty. Dr. Scott quotes "in cases of dysmenorrhœa and sterility"; I wrote "*complete stricture, accompanied* by dysmenorrhœa and sterility." If, however, he can show that every flexion of the uterus involves "*complete* stricture accompanied with dysmenorrhœa and sterility," then are we in perfect accord as to the manner of treatment to be adopted; but if not, why attempt by the merest quibbling—though he repudiates the idea—on my "vague" expression, or rather his own version of it, to prove that what I call stricture he calls stricture plus flexion?* In this line of argument he finally attempts to show that his own plan of treatment is similar to Simpson's, forgetting the while that he "has enjoyed such extended opportunities for the study of the affection as have led him to take definite views as to its pathology; and, secondly, because the treatment he has long since instituted differs from any that he is aware of as being laid down by authors, and is attended by most gratifying success." Let us now see where this similarity exists: Here is a typical case from Dr. Scott—"Taking, therefore, a case of *simple retroflexion*, we shall find the uterus, bent on itself, generally enlarged, more or less tender on pressure, capable of being lifted up into its natural position by the cautious use of the sound in its cavity, but gradually falling back into its position on its withdrawal. The cervical canal is in the form of a bent tube or syphon, and at the point of flexion behind, an inch and a half from the os, the induration previously noticed will be found.

"The treatment must be both general and local"; after which comes detailed constitutional treatment, and the author proceeds: "To assist nature in restoring the uterus to its normal position, the following operation is then performed": The operation is then described step by step, with the usual incisions, etc. Now is this the quality of case—"simple retroflexion," with canal sufficiently patulous to admit sound—that Simpson would call "stricture," and divide with uterotome accordingly? His friend, Dr. Emmet, may possibly enlighten Dr. Scott as to the treatment of this class of cases. After having shown not only the inefficacy but the constant trouble and danger arising from incisions of the cervix when the uterus is in this position, Dr. Emmet remarks: "*Retroflexion*, however, can be cured by the long continued use of hot water injection, and hot baths, blistering the neck occasionally to deplete by the watery discharge, daily glycerine dressing, and by careful attention to the state of the bowels and general health. By degrees, as the tenderness on pressure subsides, the fundus should be lifted day after day, as far as prudent, without attempting too much at any one time, with a finger of one hand in the rectum to lift the fundus, and

[*See his typical case of retroflexion further on.]

gently press the organ forward from out the hollow of the sacrum; the cervix can be depressed in the opposite direction by a finger of the other hand in the vagina." (p. 13 of pamphlet published February, 1869.)

It must certainly have been pretty far advanced into the "small hours" when Dr. Scott, after having described Simpson's usual operation, wrote: "Now if this operation, sanctioned, be it noted, by 'most esteemed authorities' does not merit the appellation of 'slitting up' or 'lacerating' the uterus with a vengeance, then words have ceased to have a meaning. And I ask the candid reader to compare it with the cautious and careful division of the constricted point sufficient to allow the free movement of the sound backward and forward, as practiced by Dr. Emmet and myself, and then say whether Dr. Buckley's aspersions are not both *unjust* and *unwarrantable*"? Let me again remind Dr. Scott that never once were my "aspersions" directed against the operation itself, but against the indiscriminate practice of it in *all* cases of uterine flexions. Let the candid reader, to whom he so confidently appeals, contrast the cases of "obstructive dysmenorrhœa" in which Simpson would operate, with the above typical case in which Dr. Scott would operate, and also bear in mind what Emmet's treatment of such a case would be. What on earth does Dr. Scott mean when he asks the "candid reader to compare Simpson's operation, with the cautious division of the constricted point, practiced by Dr. Emmet and himself"? "Dormitat magnus Homerus" verily! Poor Dr. Emmet! Does he, too, make "free incisions anteriorly and posteriorly from the fundus to the os," in cases where the "os is patulous"—[See cases reported by Dr. Davies, previously referred to]—and call the proceeding a cautious and careful division of the constricted point?

I freely plead guilty to having overlooked the word "solution" in my allusion to perchloride of iron. Of course, it will altogether depend on the strength of the solution whether its effects are caustic or not. It is quite unnecessary to quote authority in a matter of this nature. Dr. Scott has only to place a little of the liquor ferri perchloridi, undiluted, in his mouth, to know its effects. I would also remind him that Dr. Barnes uses it with equal parts of water. When he cites the "celebrated Dr. Robert Barnes" as using the liq. ferri perchloridi in post-partum hemorrhage, and flourishingly points out the similarity of the womb, in this condition, to an incised surface, it is quite unnecessary to dilate on his knowledge of the physiology of circulation in the pregnant uterus. Neither must I digress to question his knowledge of cause and consequence when he asserts that "accurate diagnosis is the basis of true pathology." I should myself have thought that a true pathology—or to speak more correctly—a true knowledge of pathology, would be the basis of accurate diagnosis. But to return. I have never once asserted that this solution should not be used, even in the cases Dr. Scott himself uses it. What I did say is "For my own part I see no physiological nor pathological reason why a simple ebony pessary in the uterine mucous membrane should be as disastrous as those tampons of cotton, soaked in caustic fluid—percloride of iron—and retained in apposition with a raw and bleeding surface in this very vascular region." It is quite clear that this objection was purely theoretical, but that the theory is to some extent borne out by fact, I will avail myself of Dr. Emmet's experience, whose pamphlet I had not seen when writing the above. Speaking of the result of incisions for retroflexion, he says: "In fact I am unable to recall a single instance where inflammatory symptoms did not occur if an attempt were persevered in to keep open the incision, while the uterus remained in this position." The position referred to is the flexion of the uterus backward, and after incisions for this malposition, with simple glycerine dressings, he usually finds 'perimetritis" and "pelvic celulites," and, as above stated, no case has come within his notice without inflammatory symptoms. Is it too much to assume that the solution of perchloride of iron does not prevent those complications? and if it does not, was my contrast of the results of both plans of treatment so wide of the mark? As to the accuracy of my statement "that some sixty per cent. of all uterine cases treated in our Liverpool institution were leucorrhœa depending solely on constitutional causes," Dr. Scott is perfectly at liberty to doubt, but I feel nowise disposed to retract or modify it, and no person will doubt that it is at least much nearer the mark than the assertion "that in nearly all chronic affections of the uterus some malposition exists." Graily Hewitt gives the following constitutional causes of leucorrhœa, among others, which, I presume, no person will question: first, moist climate; second, anæmia; third, child-bearing fourth, phthisical tendency; fifth, menstrual disorder; sixth, chronic lung disease, especially emphysema; seventh, valvular affections of the heart—and any person who has had the least experience in the large towns of the United Kingdom will readily admit the frequency of *all* those causes among the class of patients attending public institutions. On the other hand, he gives *seventeen local* causes of leucorrhœa, and among those *malposition* counts *one*, oc-

cupying by no means undue prominence among the others; so that, giving all causes equal weight, which I am by no means prepared to admit, leucorrhœa would arise from *constitutional causes* in one case in three and a half of all; from malposition, in one in *twenty-four*.

But why strain this point? No doubt accurate and experienced observers like Dr. Scott would find "malposition in nearly all" those cases that Hewitt has carelessly noted down as "general debility," and as regards those cases treated in the Liverpool Dispensary, it would be absurd to suppose that Dr. Scott could not find flexion where my friends, William Carter and John Irvine failed to do so. So be it!

"When Dr. Buckley 'affirms'" says Dr. Scott, "that in no case does Dr. Marion Sims or Dr. Emmet incise *beyond* the cervix, he states what is simply *not true*."* Does Dr. Scott call this an affirmation? "for while it *would seem* that in no case do these gentlemen incise beyond the cervix, Dr. Scott boldly launched into the matrix itself." This is simply an *opinion*, and with Dr. Emmet's pamphlet on "Uterine Disease," now before me, I see no reason to alter it, notwithstanding Dr. Scott's quotation. I find in page 6: "After a reasonable time, if there has been an improvement in the local disease, and yet the flexure continues unchanged, with *persistent dysmenorrhœa*, it is reasonable to attribute the cause to a *mechanical* one, and a *division* of the *cervix* is not only justifiable, but I deem it the duty of the physician to have recourse to it." The italics are my handiwork, and I have recourse to them for two reasons; first—to show that it is only in what Simpson would call "obstructive dysmenorrhœa" Emmet would at all incise the cervix; and, second—because it is difficult to conceive how a flexion of the *body* of the uterus on itself could be so complete as to lead to mechanical obstruction. In the next page (7) he further shows that operative interference is scarcely ever necessary except when the flexure exists in that part of the cervix which lies *below* the *vaginal junction*. I certainly can nowhere discover in this pamphlet any expression to lead to the conclusion that Emmet ever carries his incisions beyond the cervix; but it is possible Dr. Scott and I have not got the same pamphlet. That in my possession was published in New York, February, 1869. Now, though Dr. Scott were correct, which, under the circumstances I cannot concede, it is quite evident that I made no untrue statement—because no statement at all, but an opinion—and, second, it is unquestionable that the gentlemen alluded to never "make free incisions from the fundus to the os."

As to the scientific value of these latter in hypertrophied uterus, which Dr. Scott attempts to defend by asking me how I should treat this condition, it may be well to draw his attention to a very significant fact alluded to by Dr. Emmet. "I consider" he says, "a successful termination of the treatment of uterine disease to be just in proportion to the amount of induration remaining afterwards, for it is impossible for the uterus to perform its functions properly if the *cervix* is left, to a great degree, a mass of cicatricial tissue, and sterility must invariably exist." If such be the result when the cervix is cicatrized, what must the the consequence when the whole uterus, from "fundus to os," is a mass of cicatricial tissue?

The parallel which I attempted to draw between hypertrophy of the stomach, bladder and uterus is so far-fetched and unreal, I am told, as simply to excite ridicule. It is not very difficult at any time to excite this in minds of a certain calibre; but to those who indulge in it on the present occasion I recommend a careful consideration of "hæmatemesis from vicarious menstruation," and a diligent perusal of Lionel Beale's last work on "Kidney Diseases and Urinary Deposits." Here is a fine, nervous effort of scientific indignation: "Now that recent cases of *retroversion* may be amenable to such treatment (referring to use of sound, pessary, and general treatment), combined with attention to the alvine evacuations and other hygienic considerations, I freely confess; but that *retroflexion*, which is an advanced condition of the backward version, is curable by such remedies I *most vehemently deny*, and my denial is amply borne out by *all* (see West and others) who have had more experience in such cases than has evidently fallen to the lot of Dr. Buckley." My reply is—see Hewitt, Sims and Emmet, as above quoted, who possibly may have had as much experience in those cases as has fallen to the lot of the distinguished Surgeon of the California State Woman's Hospital, with its half-dozen beds. The following is after Dr. Scott's happiest vein: "Artificial support—the pessary—then, is, after all, in his estimation, the great desideratum, and the use of which, *be it noted*, extends not over a definite but an indefinite period, till—in the married—a chance pregnancy takes place which may effect a cure (how *seldom this takes place*, and how *frequently* it *recurs* after parturition, is testified to by West and others); or it must be worn till that long hoped for and much desired period arrives, the change of life, when atrophy of the organ no longer

[*The delicacy of expression herein used is not such as "gentlemen" usually avail themselves of to indicate what would be at most "incorrect," even in discussions of much less importance to the community than a very grave question of medication. In the present instance it is to be ascribed I presume, more to a general intellectual anæmia aggravated by serious alarm at a reviewer's ghost, than to any ambition on the writer's part to play the role of the mere bravado. Dr. Scott seems unable to appreciate the difference between what may be "not true" and "not the fact."

necessitates its use. Oh, most lame and impotent conclusion!" Nothing of the kind. A logician would exclaim: "Oh, most just and *rational* conclusion! Most brilliant and cogent reasoning throughout! Most perspicuous arrangement of major and minor premises!" But I beg to disclaim any right to those compliments. The above is *not* mine; indeed, my obtuse intellect cannot even follow the train of argument pursued. I am next accused of omitting a very important part of a passage which would, it is said, considerably strengthen the argument against the use of pessaries. It runs: "Take a retroflexed uterus and is it possible, with the best devised pessary ever constructed, to raise the fundus fairly above the promontory of the sacrum, and retain it there?" I wish for his credit's sake Dr. Scott had also omitted this passage, for a careful consideration of the anatomy of this region would have shown him that it is *highly undesirable* to raise the fundus as far as he would; that in its natural position and healthy condition the fundus uteri is considerably *below* the promontory of the sacrum; that it is never raised *above* it only in tolerably advanced pregnancy.

In the next place, West is quoted as duly condemning "stem pessaries." Indeed, in his work he goes farther than Dr. Scott actually tells us. He predicts that these instruments "will soon be a matter of history merely." But we find in the very next page to that from which the extract is taken, very strong commendation of Hodge's pessary, which, "be it noted," was almost as violently assailed as "stem pessaries" by Dr. Scott in his original papers. After the quotation from West is one from Hewitt, which, as it stands, would go to indicate that this author also is opposed to "stem pessaries;" yet it will be quite clear to anybody who takes the trouble to refer to pp. 504, 505 of his work, that the passage quoted refers to pessaries "having their fixed point external to the vagina." Is there any doubt of this author's meaning in the following passage, twenty lines below the quotation given by Dr. Scott: "A method of treatment I have employed in several obstinate cases, and which has been followed by good results, is, after a repeated straightening of the canal by means of the sound, to introduce a straight ivory 'stem' into the uterus, and maintain it *in situ* by means of an india-rubber air-ball, to which the stem is fixed." After which he proceeds to detail the manner of using it. Dr. Scott, after his quotation from Hewitt, asks with a victorious gladiatorial flourish, "Why multiply authorities; why beat the air?" Why beat the air? I ask also. Has he forgotten his original proposition: "It is quite evident that all who have advocated those filthy and mischievous contrivances (stem pessaries) have never considered the actual position of the healthy uterus." Now, the question is reduced simply to this: "Do Hewitt and Simpson use 'stem pessaries,' or do they not?" I answer, emphatically, *they do;* and no unworthy "air beating" of Dr. Scott's can indicate the contrary. The works of Simpson, Sims, and Hewitt all, in unmistakable language, show that those authors use all kinds of pessaries according to their requirments. I specially omit offering any comments on "buncombe," because my education in science has not yet been sufficiently extensive to interpret its meaning, and I hasten on to the question of diagnosis of prolapsed ovary. "Dr. Buckley asks," says Dr. Scott, "how is a prolapsed ovary to be diagnosed?" I refer him to page 389 of West's "Diseases of Women," and *when found* "*make a note of it.*" Here is at least one unequivocal, unalloyed triumph for a great man! Yet my question ran: "whither was the *left* ovary prolapsed when the uterus was lying to the *left?* how was it diagnosed to be the ovary?" If the prior and more important part of the question had been answered, I should feel under obligations for the reference. As matters stand, I can scarcely be expected to feel so.

Thus far I have endeavored to present, imperfectly I feel—for his last paper could easily afford matter for a considerable pamphlet—Dr. Scott, in his new character of review-reviewer; and it now becomes my duty to revert briefly to his original character of author. "The whole gravamen of the charge against me," he states, "consists in the assertion that 'incisions are not only unnecessary, but injurious in flexions of the uterus.'" I repeat, the "gravamen of the charge," if so Dr. Scott will express it, was nothing of the kind; and for his benefit I shall now endeavor to summarize the points I dwelt on.

First—In his unusual mode of proceeding—*i. e.* incisions for "nearly all chronic affections of the uterus"—for it will be remembered that he first asserted, "in nearly all chronic affections of the uterus some malposition exists;" and next signified, "that in malposition he considered every other treat ment than incisions worse than useless"—I thought we should be favored at least with statistics of his "gratifying success," as a gentleman who *publishes* a case of "ovariotomy" where the "tumor arose directly from the uterus," may possibly be liable to mistakes.

Second—That the fact of erosions of the os being commonly associated with disease of the body of the uterus, which he went to the trouble of *maintaining*, was previously generally admitted by

authorities so well known as Scanzoni, West and Hewitt.

Third—That his ideas on the "causes of flexions" corresponded *verbatim* with those of Hewitt.

Fourth—I pointed out that his comments on pessaries—"those filthy and mischievous contrivances"—were tantamount to asserting that Simpson and Hewitt "never considered the actual position of the healthy uterus."

Fifth—That the existence or non-existence of adhesions, which he claimed as an original distinction, was previously insisted on by others.

Sixth—That his assertions as to the morbid condition of the parts at the seat of flexure were opposed to the views of all our standard authorities on pathology, and that it was his duty to demonstrate the falsity of those views before making assertions to the contrary.

Seventh—That where he deemed incisions necessary—in "simple retroflexion"—Hewitt and others told us they were unnecessary. I find since that Beatty of Dublin cures this affection without incisions, and Dr. Emmet tells us they are not only unnecessary, but injurious.

Eighth, and last—That his success appeared marvellous to me, for by precisely the same means he was enabled to diminish the hypertrophied and enlarge the atrophied or undeveloped womb.

In the "Reply"—called so, I presume, by a figure of speech—after three months' deliberation, what do we find bearing on any of those points?

First—Dr. Scott assures his readers that I make "unsparing use of ridicule and exaggeration."

Second—An ill-disguised inuendo that I am a very ignorant personage, and very dogmatic—to the latter of which, only, I respectfully demur.

Third—An appeal to the candid whether Simpson's operation is not more reckless than his own *cautious* one; and then whether my "aspersions are not both *unjust* and *unwarrantable*"?

Fourth—I am charged with making an *untrue* statement where no statement at all was made, but merely an opinion given—which I see no reason to alter.

Fifth—Comes a whole volume of proof that all he has done and said is unexceptional, because his papers were referred to by the London *Lancet*, and Dr. Mathews Duncan promised to try his treatment; though really what is distinctly *his*—for incisions in simple retroflexion had been previously practiced and abandoned by Emmet—except the adoption of the same means in treating hypertrophied and undeveloped uteri, I am at a loss to understand.

Sixth—He expressed *unfeigned* satisfaction that his papers have attracted so much attention among the profession here, and jumps to the erroneous conclusion that this is a proof of their merit; this, notwithstanding that I told him in my "Onslaught," as he humorously calls a very commonplace review, that at least in some quarters they excited an amount of invidious hostility worthy of "better days."

Seventh—A *vehement* denial that "*retroflexion* is curable without operative interference," which amounts to the more vehement assertion that Hewitt, Beatty, and Emmet, among others, are deliberate propagators of falsehood.

Eighth—A flourish of impassioned rhetoric, ending "Oh, most lame and impotent conclusion"!

Ninth—I am charged with having omitted a passage in quotation which would have strengthened the argument against pessaries; which passage, as far as I can see, only indicates a perfect disregard of anatomical fact on the part of the writer.

Tenth—Quotations from West and Hewitt, condemning the use of pessaries, which by the writers were merely directed against certain kinds of pessaries.

Eleventh—"Buncombe;" and a reference to find the answer to a question which was not asked.

Twelfth—An accusation of "animus" as dictating my review, which I beg to assure Dr, Scott is not the fact.

Thirteenth—An assurance that his professional friends played on his frank simplicity.

Fourteenth—An appeal *ad misericordian* not to exterminate him, combined with a covert *nautical* threat, of which the former was never my intention, and the latter is lost on me.

These may not be the strong points of the "Reply" to other minds than mine, but I have faithfully given them as they have presented themselves to me; and what do we find in the category in any way invalidating what I advanced?

There are two things, however, that must strike every reader of the "Reply"; the first is that a very futile attempt—the futility of which I pointed out in the body of this article—to prove that Dr. Scott is, after all, merely a follower of Simpson and others, breathes throughout the whole; though he assured us at the very outset "that his opportunities have been so extensive as led him to definite views, and that his treatment differs from that of all other authors"; the second is that Dr. Scott has a powerful genius for mere personal recrimination, which in a scientific discussion it were as wise to control. No doubt, as matters of that kind go, we may soon expect to see whole mail-bags of congratulatory documents from his European admirers, on the summary manner in which he has restrained the "discursive wanderings" of this "inexperienced youth," from whom I hope he will at least accept the assurance that Truth was the object of the first communication; the repudiation of other motive than its attainment, the object of this *last*.

AUTOPSIES MADE BY J. LETTERMAN, M. D., CORONER OF SAN FRANCISCO.

Reported by EDWIN BENTLEY, Assistant Surgeon in the U. S Army.

Case 7th—"Ossification of the Aortic Valves."

S. J. G., Mexican.

Autopsy about eighteen (18) hours after death; no external marks; rigor mortis strong; short, corpulent figure; decomposition not commenced; Sectio Cadaveris.

Head not opened.

Thorax.—Lungs healthy; no pleuritic adhesions; heart enlarged, weighing 16 ounces; hypertrophy of the left ventricle; ossification of the aortic valves; and ossific plates extending an inch into the ascending aorta; atheromatous condition of all the larger arteries; 2 oz. of serum in the pericardium.

Abdomen.—Visceræ of the al domen healthy, except the liver, which was enlarged and fatty; extensive adipose deposit, 3 inches thick, over the abdominal muscles.

Case 8th.—"Chronic Alcoholism."

L. H. R., American, barkeeper, aged forty-nine (49) years.

Autopsy six (6) hours after death; no external marks; no rigor mortis. A stomach pump had been used, it having been alleged that he had taken 1 dram of phosphorus in the shape of rat poison, with the intent to kill himself; Sectio Cadaveris.

Head. Scalp congested and bleeding freely from the usual incision; vessels of the dura-mater engorged with blood; effusion of serum under the arachnoid membrane, in which is seen a flocculent deposit; 1 oz. of serum in the lateral ventricles; a coagulæ over the top of the inside of the right lobe.

Thorax. Lungs healthy; right plura adherent; left ventricle of the heart empty and contracted.

Abdomen. Cirrhosed liver; pancreas white; capsule of the spleen thickened; kidneys congested; stomach and intestines free from inflammation; no poison found.

Case 9th. "Homicide."

A. W., servant girl, American, aged seventeen (17) years.

Autopsy eighteen (18) hours after death; body well developed; cadaveris rigor present; on examination six wounds from pistol balls were observed—three on the left side of the head, two over the right side of the lower jaw, one in the belly of the biseps of left arm, and one at the posterior edge of the right deltoid muscle; front of the dress, face, and neck covered with blood; Sectio Cadaveris.

Head. Mouth and eyes closed; no discharge from the nose; deep suggillations about the head and neck; transverse incision of the scalp bleeds freely. The first ball entered the jaw near the angle, ran above the bone in the line of it for four inches, then passes out and re-enters the left arm. The second ball entered two inches above the left ear, running backwards two and a half inches between the bone and peri-cranium, emerges to re-enter from the position of the head, the right shoulder, making the wound in the deltoid muscle. The third ball enters the scalp an inch below the second, and entered the head, breaking up two large portions of the skull, one an inch and the other an inch and a half in diameter. This ball was found n the upper and back part of the middle lobe of the left side. Extravasation of blood over both hemispheres; large coagulæ covering the left.

Case 10th. "Apoplexy."

T. G., United States Navy, American, aged thirty-seven (37) years.

History. This man had been exposed to a variety of temperatures in different parts of the world, and had suffered from climatic influences. Found dead in his bed at his lodging-house.

Autopsy twenty-four (24) hours after death; physique well developed; rigor mortis present; marked suggillations abont the face and neck; Sectio Cadaveris.

Head. Scalp bleeds freely from the divided vessels; arteries of the dura-mater engorged with blood; sinuses distended with dark, grumous blood; small blood-clot over the middle of the right hemisphere; arachnoid membrane thickened, and raised with serum; all the vessels of the brain intensely congested; ventricles distended with serum; free hemorrhage from the dependent membranes; substance of the brain very firm.

Thorax. Lungs adherent; lymph over the posterior part of the right lung; upper lobe of the left, and upper and middle lobes of the right in the second stage of pneumonia; cavities of the heart distended, with conti-mortem clots, and extending into the vessels; left ventricle adherent anteriorly to the pericardium.

Abdomen. Two large transverse fissures over the right lobe of the liver, assuming the appearance of cicatrices; masses of encysted tubercle observed in several longitudinal sections; spleen very dark and pultaceous; kidneys granular; stomach congested; peritoneum inflamed and thickened; intestines healthy; pus in the pelvis and right lumbar region.

Case 11th. "Suicide."

A. E. K., American, laborer, aged forty-five (45) years.

Lived twenty-four hours after receiving his

wound, remaining all the time comatose. No powder marks on the face.

Autopsy eighteen (18) hours after death; head, face, and neck covered with blood; entrance by a pistol ball near the median line, at the top of the frontal bone; Sectio Cadaveris.

Head. Profuse hemorrhage from transverse incision of the scalp; extravasation of blood over the top of the skull; a few thin, detached scales of bone, near the opening in the bone; coagulæ over the surface of both hemispheres. The ball made a clear perforation, without the trace of a radiating fracture; opened the superior longitudinal sinus, passed along the gyrus fornicatus, was found embedded in the artical structure of the right posterior lobe.

Thorax. Lungs healthy; heart atrophied, weight 7½ oz.; large milk spot over the right ventricle.

Abdomen. Stomach full of food; intestines, liver, spleen, pancreas and kidneys healthy.

Case 12th. Poisoning. (Laudanum.)

E. N. G., American, printer, aged fifty-five (55) years.

Supposed to have taken laudanum. Found dead at Laurel Hill Cemetery, with a phial of tinct. opii. in his pocket.

Autopsy twenty-four (24) hours after death; a large, symmetrical figure; large head; countenance calm and placid; Sectio Cadaveris.

Head. Scalp unusually thick; congested, and bleeds readily when cut; bone of the skull very thick and hard; effusion of serum under the arachnoid membrane, in which flakes of flocculent were visible.

Thorax. Lungs healthy; post-mortem hypostasis; no coagulæ in the cavities of the heart; blood fluid, and of a dark color.

Abdomen. Liver cirrhosed; spleen aud kidneys enlarged; laudanum found in the stomach; intestines and peritoneum healthy.

Case 13th. "Poisoning." (Hydrocyanic acid.)

F. O., Prussian, merchant, aged forty-nine (49) years, neck very short, general obesity.

Autopsy thirty-six (36) hours after death; free hemorrhage from the scalp; fluid blood in all the sinuses of the brain; arteries engorged with dark blood; dependent membranes contain 4 oz. of blood.

Thorax. Lungs and heart healthy.

Abdomen. Deposit of adipose 4 inches in depth over the belly. Stomach removed; on dividing the œsophagus, a distinct odor of hydrocyanic acid was evolved, large quantities of which and the oil of bitter almonds were found by chemical analysis. Liver large and fatty; spleen large and soft; kidneys and intestines healthy.

Case 14. Strangulated umbilical hernia.

Y. C., France, musician, aged sixty (60) years, very large and corpulent.

Autopsy about twenty-two (22) hours after death; very muscular and plethoric; an enormous prominent abdomen; rigor mortis well developed.

Head and Thorax not examined.

Abdomen. A large, firm, distinct circumscribed tumor in the umbilical region, which a careful dissection exposes to be a strangulated umbilical hernia. The sac contained four (4) feet of ilium in a state of sphacelus. The stricture being cut, which consisted of the neck of the sac, and the adjacent parts, it was readily reduced.

Liver, spleen and kidneys in a normal condition.

Case 15th. "Suicide."

W. Y. German, machinist, aged twenty-four (24) years.

Autopsy twenty-four hours after death; Body in an excellent state of preservation, no external marks, rigor present in all the limbs; Sectio Cadaveris.

Head. From a transverse incision of the scalp, blood and serum exudes freely; scalp has a coriaceous feel; not unlike phlegmonous erysipelas; sinuses of the brain full of dark blood; vessels of the dura-mater distended; false cerbri intensely inflamed over its entire surface; Four (4) ounces of blood found in the dependent membranes.

Thorax. Lungs healthy; Coagulæ found in all the cavities of the heart.

Abdomen. Stomach and intestines intensely inflamed; peritoneum healthy; sections of liver and spleen bleed freely; kidneys congested.

Remark.—This man lived four (4) days after taking a teaspoonful of arsenious acid, in roasted apple. The skull was small and very thin, measureing not more than a line in thickness.

Case 16th. "Suicide," (Strychnine).

A. S. American, Rigger and Mariner, aged fifty-eight (58) years.

Autopsy. Twenty-four (24) hours after death; rigor mortis present; Aqueous discharge from nose and mouth; slight contortion of the muscles of the face; no external marks; Sectio Cadaveris.

Head. Very little hemorrhage from the incision in the scalp; skull very thin, fluid blood in the sinuses; effusion of serum under the arachnoid, in which are floating shreds of lymph; cerebrum and cerebellum normal.

Thorax. Slight old adhesions of the pleura; stosis of lungs; cavities of the heart empty.

Abdomen. Stomach distended with solid food; removed for chemical analysis, which proved the presence of strychnine.

Liver congested and bleeds freely from incisions; gall bladder distended, spleen very small; intestines and peritoneum healthy.

CORRESPONDENCE.

BOSTON (Mass.), November 12, 1869.

Editors California Medical Gazette:

The winter session of the Medical Department of Harvard University was opened on the 3d inst., with an introductory lecture by Richard M. Hodges, M. D., Adjunct Professor of Surgery and Clinical Surgery. It is impossible to give a *resume* of this address which would do anything like justice. Although upon topics long ago worn threadbare, it was crowded to repletion with original and sparkling thoughts, practical suggestions, sound advice, and pertinent illustrations, gathered from the lives of the great masters of the medical profession.

No medical school can boast of a more accomplished and efficient corps of professors and instructors than the medical department of our venerable Harvard; and although its excellence and standing have been fully acknowledged in the past, it never before has been able to offer the advantages and facilities for attaining a medical education which it does at the present time. The man who devotes three years to faithful and honest study in the training of the Harvard Medical School must necessarily, at the end of that time, have secured a good and thorough professional education, providing he were not a dunce at the outset.

We now have from the State Board of Health a weekly report of the mortality in the larger cities and towns of the Commonwealth. The report for the week ending October 30th shows the number of deaths in thirteen places to be 204, of which 41 were from consumption, 19 from typhoid fever. Deaths in seventeen cities and towns for the week ending November 6th, 215; of these, 38 were from consumption, 21 from pneumonia, 13 from typhoid fever, and 11 from croup.

Much information in regard to the relative prevalence of different diseases in different localities may, after a time, be gathered from these reports. Two weeks, of course, are too limited a period from which to draw any conclusions; yet, taking the two weeks mentioned, we find that of an aggregate of 181 deaths occurring in this city, 34, or about nineteen per cent. of the whole number were caused by consumption. In the remaining cities and towns from which reports were received, the whole number of deaths amounted to 238; of which 45, or about nineteen per cent., also, were from consumption. Again, in the same two weeks typhoid fever was the cause of 9 deaths in this city, or about five per cent. of the whole number for that time, while the remaining cities and towns heard from, out of an aggregate mortality of 238, reported 23 deaths from typhoid fever, or about ten per cent. of the whole number; thus confirming what has long been known to be a fact — namely, that typhoid fever is less prevalent in cities with good drains and sewers and a good supply of water, than in smaller places where the drainage and sewerage is imperfect or defective, and the water likely to be contaminated with decomposing animal and organic matters. Particularly is this latter the case in the suburbs of the smaller places, and also in the country, where wells supply the water. I think, however, that the above figures do not show to the full extent the general comparative immunity of this city, and other large cities, from the disease in question, as, during one of the weeks referred to, there were 7 deaths from this disease in this city—an unusually large number.

Dr. Minot read an exceedingly instructive report of several cases of diphtheria at a late meeting of the Society for Medical Observation. In one of the cases reported, the period of incubation could not have exceeded four days; the circumstances being such that the disease must have been contracted within that length of time previous to the manifestation of its first symptoms. Another case of interest occurred in the person of a lady sixty-five years of age. She had an attack of the disease, which was followed in two months by paralysis — asthenia — accompanied by acute mania, death resulting at the end of a few days. The depressing effects of the disease in question are well illustrated by this case, although no alarming symptoms were manifested until the expiration of two months after the primary attack.

Dr. J. O. Green reported a case of urethral calculi, removed by perineal section. One was extremely large, measuring five and three-sixteenths inches in its larger and four and one-half inches in its lesser circumference, and weighing seven hundred and forty grains. J. B. T.

BIBLIOGRAPHICAL NOTICES.

A Text-Book of Practical Medicine, with Particular Reference to Physiology and Pathological Anatomy. By Doctor FELIX VON NIEMEYER, Professor of Pathology and Therapeutics, Director of the Medical Clinic of the University of Tubingen. Translated from the Seventh German Edition, by George H. Humphreys, M. D., &c., &c., and Charles E. Hackley, M. D., &c., &c. New York; Appleton & Co., 1869. Two Volumes, pp 731, 761. San Francisco; A. Roman & Co.; H. H. Bancroft & Co.

This work is to the practitioners and students of Germany what Watson and Wood were, or what

Aitken, Bennett and Flint are, to the profession in Great Britain and the United States. Most of our readers already know something of the author by reputation. His fame as a student, a successful teacher, a close and careful clinical observer, and as a man of sound, practical common sense, having preceded his text-book to this country. It is only about ten years since the first edition of this work appeared, and the fact that the seventh was called for in so short a time is the best evidence of the popularity it enjoys in Germany. Though we may be said to be well supplied with medical text-books, we have no hesitation in pronouncing the addition of this one a necessity. We should have a representative book of German practice. Nowhere are there better opportunities for clinical observations, or more enthusiastic or pains-taking observers. Nowhere is therapeutics so carefully studied, or pathological doctrines more thoroughly sifted. The author is, in every sense of the word, a progressive man, ever ready to impartially investigate new theories, and anxious to conclusively test all that is new in practical medicine. Though his work is prepared with particular reference to physiology and pathological anatomy, he by no means ignores empirical practice, when the result of careful clinical observation.

The author believes that the "empirical method of investigation is the only rational and proper one for the study, either of therapeutics, or of any other department of natural sciences." No man urged this doctrine stronger than our great clinical teacher, Graves. It was also maintained by Trousseau.

It is highly gratifying to see that his list of remedies is by no means large, and also to see that he has no respect whatever for the reputation of a medicine, unless it maintains its reputation by clinical results. In fact, he may be said to be particularly sceptical as to the efficiency of medicines unless he is thoroughly convinced of their beneficial effects from clinical experience.

For the special benefit of those who are always ready with a prescription to absorb any effusion, we will quote his remarks in regard to the effusion of pleurisy, with the sincere hope that they may save some poor fellow a course of drastic cathartics, in connection with the most approved absorbents:

> Remedies for the promoting of re-absorption of the effusion deserve little reliance. It is, indeed, questionable whether it be possible, by any therapeutic means, to bring about the conditions upon which the absorption of pleuritic effusion depends. If, after the inflammatory symptoms have subsided, the effusion remain undiminished, all medication, both external and internal, is to be rejected, and the application of blisters is of very doubtful use. * * * The action of the diuretics, of which bi-tartrate of potash, boracic cream of tartar, and the juniper-berry are the best, is very uncertain, so that we can not promise ourselves much from their use, and the pernicious effects of the drastics upon digestion and assimilation forms a serious objection to their employment. * * * * An attempt may also be made to excite re-absorption by the outward and inward administration of iodine, which has a well known reputation as an absorbent. I have seen such remarkably rapid absorption take place under the internal use of syr. ferri iodide, in conjunction with the external application of a weak compound solution of iodine upon the affected sides of the chest, that I can not help regarding the beneficial action of this prescription as probable, although I do not regard it as proved. (pp. 272, 273.)

Digitalis, a favorite absorbent with many practitioners, is also used frequently by the author; not as an absorbent, however, but more correctly, as we think, to remove the cause of the effusion.

> Prepossessed by the doctrine of Traube, regarding the effect of digitalis upon the contractile force of the heart, and the tension of the aortic system, I formerly regarded the use of this remedy in dilatation of the heart as unnecessary, and even dangerous. Of late years I have convinced myself, from a great number of observations, that digitalis is a very efficient means of temporarily strengthening the heart's contractile powers, and of thus allaying cyanosis and dropsy. In dilatation of the heart, digitalis, when combined with an exclusively milk diet, is an invaluable remedy. I have repeatedly succeeded in obtaining complete removal of dropsical effusions of great magnitude, and produced considerable temporary relief by this mode of treatment. (p. 325.)

In reference to bleeding, he says:

> Which ever one of the current theories upon inflammation we may adopt, none of them even partially upholds the efficacy of venesection in pneumonia. The fact is, unfortunately, forgotten, and the most intense hyperæmia, by itself, can not occasion croupous inflammation.
>
> I had rather that any one, dear to me, and sick of pneumonia, were in the hands of a homœopath than in the hands of a physician who thinks that he carries the issue of the malady upon the point of the lancet. (p. 184.)

For our part, were we sick of pneumonia, and were obliged to have a fool for a doctor, we would say, by all means let him be a homœopath.

As would be expected from a man who is so careful to observe, and competent to judge of results, he has no faith in the anti-phlogistic power of mercury.

We might quote pages of his treatment of diseases, and on the action of medicines, that would be as instructive as interesting to our readers, who may not yet have had an opportunity to examine the work for themselves. We will however, content ourselves by directing their attention to the author's views on tubercle and consumption.

Many of our readers know that Niemeyer advocates Virchow's pathological views on consumption and tuberculosis, and that Lænnec's doctrine is no longer universal.

> Tuberculosis of the Lungs.—The term pulmonary tuberculosis continues to be the expression most commonly

used to signify consumption of the lungs, a proof that the majority of modern physicians and clinical teachers still adhere to the teachings of *Lænnec*, and only recognize one form of pulmonary consumption, the tuberculous form. I have long contested this doctrine, and upon various occasions, have declared in direct contradiction to it, that destruction of the pulmonary tissue, the establishment of cavities and consumption of the lung are much more frequently a result of chronic inflammation than of tubercular deposit. And I hope that these views, of whose justness any one may easily satisfy himself who will only study the subject with calmness and without prejudice, will ultimately obtain general acceptation.

The error into which *Lænnec* and his disciples have fallen, is not that they regard tubercle as a neoplasm, but that they look upon solidifications of the lung, due to entirely different causes, as products of tuberculosis.

Even according to modern views, tubercle still ranks amongst the pathological neoplasms, although however, but one form, the *miliary* form, and one mode of origin, *miliary* tuberculosis is recognized. It is one of the characteristics of tubercle, that it always appears in the form of small nodules scarcely as large as a millet seed, and that the individual nodules never grow into voluminous tumors. The larger so-called tubercular nodules, consist always of an aggregation of many small miliary tubercles. All the extensive indurations and enlargements formerly described as *tuberculous infiltration* or as *infiltrated tubercle*, depend neither upon infiltration of the tissues with tubercular matter nor upon diffuse development of tubercle, but upon morbid processes of a different nature.

In the lungs it is most especially the residue of chronic inflammation which *Lænnec* and his pupils have regarded as tubercular infiltration. The main source of their error was the idea that *cascous(?) metamorphosis*, to which tubercle of long standing almost invariably is subjected, was a specific peculiarity of the disease, and that it might be regarded as a diagnostic mark by which the tuberculous nature of a growth, wherein the process arose, might be determined. According to such views, the product of chronic pneumonia, which often appears in phthisical lungs, independent of tubercle, was ascribed to tuberculous, since, generally speaking, this inflammatory product at first is moist, transparent and of a grayish, or a grayish red color, and after a lapse of time, becomes transformed into dry, opaque, yellow cheesy masses and subsequently into a creamy or curdy flaccalent liquid ("tubercular" pus.)

By this important step in pathological anatomy, for which we are chiefly indebted to *Virchow*, the very foundation of the teaching of *Laennec* is swept away. * * * *

He makes three additional points, so to speak, in the etiology of phthisis. He says:

I regard the wide-spread doctrine that consumption is solely dependent upon a diathesis, from which it proceeds independently of all so-called "exciting causes," as equally gratuitous and dangerous. (p. 214.)

The tendency to consumption is, in many cases, congenital. When the congenital tendency is due to the fact that the parents were consumptive at the time of begetting the offspring, it may be properly spoken of as inherited. But it is not (as is often asserted) the malady which causes the inheritance, but the weakness and vulnerability of constitution which had already laid the foundation of the consumption in the parents, or which had arisen in them in consequence of that disease The hereditary constitutional feebleness of the offspring may proceed from other diseases of the parent instead of consumption. Parents afflicted with other exhausting maladies, or who are ruined by debauchery, or who are far advanced in years, are quite as liable as consumptive parents to beget children who come into the world with a predisposition to consumption. (p. 213.)

Thus he denies the necessity of a peculiar diathesis and debility alone in the parents, to cause a case of phthisis in the offspring.

And, secondly, that hæmoptysis, when unaccompanied by physical signs of tubercles, but which is followed by consumption, was not caused by the presence of tubercles in the lungs, as is generally believed.

Many physicians do not hesitate to accept a brisk hæmoptysis as a sure sign of incipient, or even established tuberculosis, although the patient may present no symptoms, either subjective or objective, of disease of the lungs, and when, soon after the occurrence of hæmoptysis, signs of consumption have arisen, they confidently assume that the bleeding has been caused by the presence of tubercles, or by process of its deposit in the lungs.

I must earnestly protest against this opinion, as altogether unwarranted, and fraught with danger to the patient. * *

In the very great majority of cases in which the first attack of hæmoptysis has not been preceded by either cough, dyspnœa, or other signs of pulmonary disorder, the lungs are free, and by no means the seat of tubercular deposit, at the commencement of the bleeding. (p. 143.)

And, thirdly, he teaches that consumption is frequently caused by repeated colds.

Even a simple, genuine catarrh may extend into air vesicles in a person of apparently perfect health and vigor. Healthy men should never feel sure that they will not die of an acute or chronic catarrhal pneumonia, proceeding from a cold, and resulting in caseous infiltration and destruction of the pulmomary substance. (p. 210.)

We cannot close our notice of this admirable treatise without expressing our gratitude to the translators, Drs. Humphrey and Hackley, for the service that they have rendered to the profession in this country and Great Britain. The American publishers, also, have done their work admirably.

The Pathology and Treatment of Strictures of the Urethra, and Urinary Fistulæ. By Sir Henry Thompson, F. R. C. S., Etc., Etc. From the Third and Revised London edition. Philadelphia; Henry C. Lea, 1869., pp. 354. San Francisco; A. Roman & Co.,

It is too often that after a work reaches its third edition, it has grown too large. While the author finds it necessary to add much to each edition, in order to keep it up to the times, he has seldom common sense enough to omit much that is no longer necessary. In this volume the author has had the good sense to omit and condense, so that the third edition with all the additions of material that

is necessary to make the work authority to date, is reduced some eighty pages. This we consider one of the attractive features of the work. We get all we want to know without unnecessary labor. The work having reached its third edition, it is unnecessary to give extracts. We can conscientiously recommend this, as the most desirable work on the subject in our language. Mechanically, the volume is well executed, being bound neatly in cloth. The publisher's name however, is sufficient guarantee for the mechanism.

Handy Book of Ophthalmic Surgery for the use of Practitioners. John Z. Laurence, F. R. C. S., M. B., Surgeon of the Ophthalmic Hospital, Southwarl, Etc., Etc. Assisted by Robert C. Moon. Second edition, pp. 222. Philadelphia; Henry C. Lea, 1869. San Francisco; Roman & Co., and H. H. Bancroft & Co.

Ophthalmic Surgery and Treatment, with Advice on the Use and Abuse of Spectacles—pp. 510. By John Phillips, Optician and Oculist. Chicago; W. B. Keen & Co., 1869.

Diseases and Injuries of the Eye. Their Medical and Surgical Treatment—pp. 436. By George Lawson, F. R. C. S., Surgeon to the Royal London Ophthalmic Hospital, Etc. Philadelphia; Lindsay & Blakiston, 1869. San Francisco; A. Roman & Co.

Hand Book of the Diseases of the Eye. Their Pathology and Treatment—pp. 123. By A. Solomons, M. D., Etc., Etc. Boston; James Campbell, Publishers, 1870. San Francisco; A. Roman & Co.

1. This is, as its name suggests, a book for convenient reference rather than an exhaustive treatise, and as such, it will be found very valuable to the general physician. It gives in very brief terms the symptoms and history of the various diseases of the eye, with just enough cases detailed to elucidate the text without confusing the reader.

Some few points of treatment may be criticized as old-fashioned; for example, Mr. Laurence does not seem to have learned that when it becomes necessary to insert a style to keep the nasal duct open, it may be done through the canalicular aperture of the sac, better than through an unsightly wound in the cheek.

In most cases however, he gives the most modern and approved treatment, giving his reasons in full when he differs in opinion, as he sometimes seems to do, from the acknowledged leaders of ophthalmic surgery. His chapter on examination of the eye is particularly good, and it seems to us, better calculated to enlighten a novice than any similar instructions we have read. A point deserving special commendation, is the frankness with which the author acknowledges occasional unsuccessful cases.

The book is printed on excellent paper, in very clear type, and reflects credit on the American publisher, Henry C. Lea, of Philadelphia.

We may say that either of the above four hand books, would be very useful to the general practitioner. The second one being perhaps a little large, while the last is almost too concise. The third —Lawson's—we cannot recommend too highly; it is an admirable text book for the general practitioner. In fact we do not know that we have its equal in our language.

Man in Genesis and in Geology; or, the Biblical Account of Man's Creation. By Joseph P. Thompson, D.D., LL.D. New York, Samuel R. Wells, 1870. San Francisco, A Roman & Co.

We have not read this work, and perhaps never will. Our experience in the study of this subject has been quite discouraging. We have generally found that those who know the least, and believe the most, have the most fixed, and to their minds the most satisfactory, if not the clearest, ideas of man's origin and antiquity.

ACADEMY OF SCIENCES.

The regular semi-monthly meeting of the Academy of Sciences was held on the evening of December 6th, Prof. Blake in the Chair. A. W. Bowman and John Taylor were elected resident members.

DONATIONS.

A large collection of shells, radiata and fossil corals, from the Florida coast, were presented in the name of R. E. C. Stearns, former Curator of Conchology in the Academy, who has been on a collecting trip down the Southern Atlantic coast, and is still on that side of the continent.

The receipt of a number of scientific works, subscribed for by the Academy, was reported by the Librarian.

A TALK ABOUT TREES.

Dr. Behr mentioned the plentiful existence in Southern Australia of a species of Eucalyptus (gum tree), which when used for piles in salt water, is not molested by the pholas, and thought it might be advantageously imported for trial in the harbor of San Francisco, where the *toredo navalis* is so destructive to the wharf timbers. Unlike some other species of Eucalpytus, it can be easily worked. The tree grows to a great hight, and could be cultivated here like other members of the family. Dr. Behr also mentioned another Australian tree which grows finely in salt marshes, and could be advantageously cultivated here, suggesting that the attention of the Chamber of Commerce be given to both.

Prof. Bolander stated that Prof. Engleman, of St. Louis, one of the most accurate and distinguished botanists, had returned from Europe, where he had studied the classifications of coniferous species, and verified the arrangement and nomenclature of the California species, as determined first by

the Geological Survey of California, and presented to the California Academy by Prof. Bolander a year or two since. The species number 33, and are now finally settled—a fact of much importance and satisfaction to the students of California flora. Prof. Bolander stated that there is no other part of the world, so far as known, where there is such variety and richness in the coniferæ as in this State.

Prof. J. D. Whitney, who was present, observed that in the Rocky Mountains of Colorado, where he has been the past summer, there are only six species. Prof. Bolander will hereafter present a paper on the distribution, character and economical value of the California coniferæ.

Dr. Kellogg remarked that the richness of our coniferæ was all the more remarkable in contrast with the poverty of our foliaceous trees, which are few outside of the valley oaks.

SCIENTIFIC EXPLORATIONS IN CHINA.

Prof. Whitney, State Geologist and former President of the Academy, read extracts from several communications on subjects of scientific interest. Among these were some very interesting notices of geological explorations in China, by Baron Von Richthofen, who went to that country from this State, and has been there about eighteen months—the second scientific explorer who has gone thither from California, the first being Prof. Pumpelly, who has recently issued a work on China. Baron Richthofen was encouraged to hope the Chinese Government would aid his scheme for something like a thorough geological survey of the country; but in this he has been disappointed, and, his money giving out, he has been obliged to abandon the work he had undertaken, although he hopes still to lay at least some sort of foundation, which may guide and stimulate further exploration. He has succeeded in establishing meteorological stations along the coast, at Pekin and up the Yang-tze-kiang. He records his opinion that progress in scientific knowledge, as in other things, must be forced upon the Chinese. Their voluntary action is retrogressive. In this view he is directly opposed, as Prof. Whitney said, by Prof. Pumpelly. The Baron's notes on the geology of China state that he was obliged to abandon Pumpelly's distinction of one great granite-metaphoric formation, one great Devonian limestone formation, and one great subdivision embracing the Chinese coal measures. The lowest formation he observed is the Taho sandstone, a series of coarse variegated sandstone, not interrupted by conglomerates or shales. Next a series of shales from 1,000 to 3,000 feet thick, largely distributed. Third, a superposition of limestone schists. Fourth, a period of great disturbances and outbreaks of granite. Fifth, an undisturbed series of sandstone. Then a limestone formation 600 feet thick, full of nodules and fossils, some of the latter indicating the Devonian age. Over this lays another limestone formation, of three varieties. Sandstone and conglomerate, and deposites of porphyritic tufa, sandstones and clays follow, ending the series of the ancient formations as observed on the lower Yang-tze.

WHITE PINE MINERALOGY.

Prof. Whitney read a succinct statement of the leading characteristic of the White Pine mineral region, written by J. E. Clayton, which is too long for our present space. He stated that he had a large collection of White Pine fossils for presentation to the Academy.

RISE OF THE LAKES IN THE GREAT BASIN.

Prof. Bolander called attention to the fact, recently reported to him on reliable authority, of a marked rise in the waters of Lake Mono, since the earthquake period of 1868, and added that the rise had been followed by a freshening of the water and the total disappearance of the dense cloud of flies which formerly deposited their larvæ on the shores of the lake. Prof. Whitney stated that there is evidence that Lake Mono was once 600 feet higher than now. He added that Great Salt Lake and Pyramid Lake have also risen within a year or two. He thought there were recurrences of rise and fall in the lakes of the Great Basin, corresponding to periodic climatic changes. Dr. H. Gibbons endorsed and elaborated this view, and an interesting conversation on California meteorology followed, in the course of which Dr. Gibbons said that the observations of 20 years do not warrant the opinion that the present winter will be unusually dry. We have just about reached the ordinary period for the beginning of the heavy rains, and the atmospheric condition indicates a climatic change. Prof. Blake commented upon the unusual prevalence of northerly winds, in compensation for the rain-bearing warm currents flowing from the south in other parts of the country. The Academy then adjourned.

At a regular meeting of the Academy of Sciences, held on the 20th inst., the minutes of last meeting were read and approved, after which the following corrections were made—viz., Mr. Stearns sent in his collection from Florida, the cones of the pinus taeda; Dr. Kellogg suggested that the word "silva" should be used instead of "flora" in Professor Bolander's remarks on the coniferæ of California.

Mr. Donald Bruce was proposed for membership by Mr. Brooks.

Mr. J. C. Brooks was proposed for corresponding member by Dr. Ayres, who stated that he was an earnest and active member of the Historical Society of Long Island.

Dr. Behr presented a specimen of corcopsis, and stated that it had been raised from seed received from Guadalajara. It differs from the other species in having the radii pink instead of yellow.

Mr. Holliday spoke of a collection of minerals and fossils etc., collected by Lieutenant Wheeler in the region of country between White Pine and the Colorado River, and now in possession of General Ord in this city, which might be of interest to the Society.

Professor Whitney gave an account of the explorations of a party, under his charge, in the Rocky Mountains during the summer of 1869. This expedition had for its object the topographical and geological survey of the South Park of Colorado and the adjacent region, including, as is believed, the highest summits of the Rocky Mountain range. The party consisted of a dozen persons, including Professor Brewer, of Yale College, Messrs. W. H. Pettee and S. P. Sharpless, of the Harvard Mining School, and several students of that institution, as also Mr. C. V. Hoffman, formerly of the California Geological Survey. A careful topographical survey was made of the South Park and the adjacent mountain ranges as far north as Grey's Peak, and a portion of the region about the head of the Arkansas River. The hight of many points was determined by barometrical observations, compared with an instrument observed at Denver. As soon as the elevation of this place shall have been ascertained by the railroad surveys now in progress, the height of the points measured above the sea-level can be given. At present, it can only be stated that there are quite a number of mountains in the region visited which are over 14,000 feet in height, but probably no one which much exceeds 14,500. Grey's Peak is the highest point east of the Arkansas River

and Mount Lincoln is but little inferior to it in altitude. The most elevated summits, so far as yet ascertained, are west of the Arkansas. The highest point reached by the party was found to exceed Grey's Peak in altitude by about a hundred feet. It was called Mount Harvard. Another grand peak, six miles south of this, was called Mount Yale; this was of nearly the same height as Mount Lincoln. There are quite a number of points in this range which are nearly as high as those measured, and possibly some which are even higher; but there are in this region so many mountains so nearly of the same elevation that it will be difficult to decide which is the dominating peak until quite a number of them have been ascended and measured.

Dr. J. G. Cooper read a paper on the west coast fresh water univalves, which will be published in the proceedings of the Academy.

Dr. Carl Von Scherzer, Chief Commissioner of the Commercial and Scientific Departments of the Austro-Hungarian Embassy to Eastern Asia and America, was present and made some very interesting remarks upon his mission around the world, and his efforts in China to establish a treaty. He spoke of the difficulties which his friend Baron Von Richthofen and all other scientific foreigners have in endeavoring to make scientific explorations and surveys in China. They are opposed at every point by the Government officials, who are still jealous of all foreign enterprise.

GRAEFE.

Dr. Beard, in a letter to the *Medical Record*, gives the following account of this distinguished physician:

"The many friends of Graefe in America will regret to learn that his health has been so feeble that he was obliged to suspend active labor and flee to Switzerland. I was informed, however, by one of the assistants of his clinique, that his affection, which was of a pulmonary character, has been so far relieved by change of air and scene, that there is a good probability of his return to the duties of his profession.

"The popularity of Graefe among the masses of the people is, I think, unparalleled in the medical history of modern times. It is to be accounted for partly by the fact that, although of noble descent, his sympathies have been with the people; partly by his well-known clinique, where six thousand patients are annually treated; partly by a personal magnetism that both fascinates and inspires; and partly, also, by the good fortune in having been born in a land where scientific men are better appreciated and more highly honored than in any other nation of our times.

"A distinguished writer, matchless in sarcasm, has said of Westminster Abbey, "that it contained many monuments without a name, and many names without a monument." The same remark will not so truly apply to modern Prussia, for here the laurels are prepared for men of thought as well as men of action, for philosophers and thinkers as well as for kings and generals, for those who save life as well as for those who destroy it. Even Berlin, fresh in the excitement of a victorious war, seems by no means to bring the first fruits of its affection to the altars of royalty—at least, so far as can be judged from the numberless pictures, photographs, and other similar expressions of the popular feeling that abound in the streets and shops of the city. Far above the names of King William and Bismarck, and surmounting them, as the dome of a cathedral surmounts its minarets and towers, is the name of Alexander von Humboldt. Such popularity of scientific men is unknown in America or in England. They here accord to Humboldt the honor which we are accustomed to bestow only on military deliverers and distinguished statesmen; and the shop-windows and bookstores of Berlin display almost as many remembrances of that great leader in sciences as New York presents of Washington and Lincoln.

"Next to Humboldt, the scientific name which is dearest to the masses of the people in Berlin is that of Graefe."

California Medical Gazette.

SAN FRANCISCO, JANUARY, 1870.

☞ *All Letters and Communications to be addressed to the* "EDITORS CALIFORNIA MEDICAL GAZETTE, *care of A. Roman & Co., San Francisco.*"

MEDICAL LEGISLATION.

A Bill is before the State Legislature which has for its object the regulation of the practice of medicine. Its details are unknown to us, nor do we care to know them; but we will make it the occasion to offer some reflections of a general character on the questions involved in such legislation.

What is the theory on which such action is based? It may be, first, on the right of society, through its Representatives in the Legislature, to frame laws for its own protection against the abuses it suffers from ignorant pretenders and impostors, who trifle with human life, as against all other classes of criminals. If swindling unsuspecting people out of their property is a proper subject for legislation and punishment, how much more necessary is it to protect them from those who will not only rob them of their money, but of their health and lives under false pretences, such as promises to cure, which no honest men should ever give. Concerning such legislation, there ought to be no difference of opinion: it is based on the theory of self-preservation; the first law of nations, as of individuals, and the farther society advances in all that pertains to a healthy civilization the more thoroughly will such laws be enforced.

This is a question, however, in which the medical profession have no more concern than other citizens; they are more interested because they are better informed as to the extent of the evil under which society suffers. It has always been the refuge of quacks, when attempts have been made to enact laws for their punishment, or execute those that were enacted, to represent that they were the victims of persecution by an interested and privileged class; the liberty of the citizen is assailed, the right of conscience denied!

We will here enter our protest against an idea that is too general. The medical profession has no protection or privilege derived from legislation; its members stand, like all other citizens, responsible to the public law, nor do they ask any privilege not enjoyed by all other classes.

The real difficulty which society finds in protecting itself from the evil in question, the magnitude

of which has never been fully appreciated by the public, arises from its own bad legislation, and not from the want of it; and this brings us to the second point involved in the question.

In all European countries the theory of their governments finds it perfectly consistent to prescribe laws determining what qualification shall be necessary to practice medicine, and, in protecting the profession, they protect society from medical impostors; but in nearly all the States of the Union the Legislatures have put it out of their power to protect the people from quackery, by putting it out of the power of the profession to protect themselves. They have broken down the barriers which were erected by the profession; they have conferred upon irresponsible men the right to confer the title of Doctor of Medicine. The result is that they no longer possess a test by which to judge of professional qualification. Colleges are scattered throughout the land, possessing the power to confer the same degree, though they do not teach the same principles. There are hydropathic, homœopathic, eclectic, and a variety of other institutions, which ignore all sound principles of science or even common intelligence. There are others, professing to be regular, in which cliques of physicians, aspiring to be teachers, have procured charters from Legislatures, and who do not represent the average intelligence of the profession, mere joint stock diploma-selling corporations, who annually send out recruits to the army of quacks, illiterate Doctors of Medicine to prey upon the community, and drag down the little respect that is left for a once honored title. We are sorry to be compelled to write our own professional humiliation, but the evil is so general and alarming that we have no choice, when alluding to it, but to tell the whole truth. *The possession of a diploma from a respectable college is no evidence of qualification to practice medicine.* The National Medical Association has for more than twenty years been laboring to remedy this evil by raising the standard of medical education, but without success, except so far as particular colleges are concerned, with whom the honor and welfare of the profession and society are paramount to selfish considerations; but it is safe to predict that the efforts of the National Association will be comparatively abortive until all hope is abandoned of restoring the lost honors to the title of Doctor of Medicine.

When the Association is convinced of this, and addresses itself to the work of establishing its own standard of medical qualifications, and shall confer its own title upon its members, with subordinate associations in each State, then it will have taken the only available road out of the wilderness, by leaving the cast-off epaulettes to the army of irregular practitioners, sea cooks and scullions. To this resort the National Assocation must come at last, and the sooner it is done the better. Then they may ask for legislative protection only to punish all such as assume its title without its authority.

This, it seems to us, is all the legislation that should ever be asked for by the medical profession.

THE INSANE ASYLUM.

In his biennial message to the Legislature, Gov. Haight, speaking of the Insane Asylum at Stockton, bears testimony to the admirable manner in which the responsible duties of resident physician and assistant physician have been discharged by the gentlemen who have for some years past acted in that capacity. He recommends that the present system of choosing Directors—half at each biennial session by joint convention of the two Houses—be discontinued as offering a field for political contest for the Superintendency, and that a Board of eight or ten Directors be chosen, one to retire each year, who shall possess the same powers as are now exercised by the present Board. He argues well as to the impropriety of changing the medical officers, but points out a very effective way in which that undesirable thing could be accomplished. If the proposed Board of eight or ten Directors were chosen with especial reference to their fitness for the trust it would be well, but if the selection were to be based on partisan grounds, we cannot see what would be gained, for the government of the asylum would be changed as often as the political character of the Legislature changed. Nor would the difficulty be remedied by appointing one-half from one of the leading parties and the other half from the other, for it would be a little better than violating the law prohibiting bear-baiting and cock-fighting. Let us have one institution at least in the State governed by men who have won distinction in some other field than the arena of politics, and what one more fitting than the Insane Asylum, where nine hundred irresponsible beings are at the mercy of the State. Let them be appointed also for some higher qualification than the possession of wealth, as was not the case of some who hold positions as Regents of the University.

We apologize to those contributors whose articles are crowded out, promising that they shall appear in the next number.

Owing to the unusual length of the original articles, we have been obliged to add several extra pages to this number.

It is a cause of congratulation to the friends of the Gazette that it has been received with so much favor. The editors assure their readers that the sole motive that has animated them in undertaking its management has been the desire to unite the profession on this coast, to elevate it in the public confidence, to do all they can to suppress quackery, and to afford a medium through which the intelligence and just sentiments of all medical men may find expression. They desire, above all things, to serve no party or clique in or out of the profession. They are aware of the interest that attaches to all that pertains to this coast in its medical aspects; as well as in its natural history, meteorology, etc., and their desire is to afford all who are engaged in investigating any of these subjects a worthy means of laying the results of their labors before the world, here, in the field of their endeavors. While they will not hold themselves responsible for communications sent to them, they will in no partizan spirit suffer a statement to pass without giving an opportunity for a refutation if made in a proper spirit.

A Good Time Coming.—In a communication to the Gynæcological Society of Boston, on blood-poisoning after pelvic and other surgical operations, Carl Both says: "With the least attention to the condition of the blood and body, we may defy any contagious disease, whatever its name may be, as I have repeatedly proved upon my own person. Such contagions are for a miserably constituted body exactly what bad company is for a bad boy.

We clip the following extracts from the Evening *Bulletin* of December 18th.

To the Public.—Grateful for the eminent services of Dr. J. J. McBride, I cheerfully make a statement of the following facts: For twelve months I had suffered from prostration of my nervous system, resulting in partial paralysis and almost total loss of sight. A score of physicians had abandoned my case as hopelessly incurable. I had even heard my days numbered by doctors and friends. In the agonies of my neuralgic pain I sought the great "King of Pain." Under that benign influence in one half hour I had obtained more medical aid than I had known for long weary months. My sight was so much restored that I could read print, although I needed a guide to find Dr. McBride's office an hour before. Before leaving him I had regained the use of my almost palsied limbs, and seemingly my strength had returned, while all those aches and pains—my constant companions—were dissipated and gone. It is now ten days since I undertook treatment with Dr. McBride.

An Extraordinary Surgical Operation. — About nine months since Dr. A. J. Bowie, in the presence of a number of his fellow physicians and surgeons, performed an extremely difficult and very successful operation on the person of a Mr. Durbin. It consisted in penetrating the abdominal cavity of the subject and accomplishing a ligation of the common internal iliac artery, an operation which was done but unsuccessfully by Dr. Mott, Sir Benjamin Brodie and Sir Charles Bell. The patient's difficulty in the present case was a large abdominal anuerism situated high up in the cavity of the abdomen, and which must certainly have resulted fatally to the patient in a short time. It is stated that Mr. Durbin was prepared for death, and before the surgeon commenced his work, the last rites of the church had been performed for the unfortunate man. He is now permanently convalescent.

A Wonderful Cure.—Having been afflicted for over twenty years with a disease in the left nostril, which has been called by different names—cancer, scrofula and ozœna—different physicians have tried their skill in attempting its cure, but without success. It has rendered me incapable of labor for the last two years. Since the beginning of last June I have been in the Sacramento hospital reduced to a mere skeleton. On the 22d of November I left the hospital, and since the 26th have been under treatment of Dr. Aborn in this city, and the disease is nearly cured and my strength and general health much improved; and I have full confidence of a perfect cure. Already I have gained many pounds in weight, and I feel like another person. The success of Dr. Aborn's treatment in my case should be sufficient to encourage all who have chronic diseases to make another trial for that good prize—health. William Beardslee.

And the following bit of intelligence is sent by telegraph from Salem, Oregon:

Dr. Carpenter to-day removed a cancer from one of the convicts in the presence of the medical students.

Note.—The following note illustrates the literary acquirements of many of our M. D's. In the present instance we are unable to say whether the M. D., was sent to order, or whether it was obatined from a highly respectable institution, the result of careful examination by grave and learned seniors of our profession.

Dec the 2d, 1869.

Gentlemen

Will oblig Dr ——— if they Will inform him of the Prise of Beaches Amarican Practise if you hav it in Store or Can Git it in the City.
it Coms in 3 Volums. Published By Scribner.
Please send Catalog all so & oblig yours
Dr. N. C. ———.

P. S. Som years ago you Sent me the 3 Volums to Diamond Springs & they hav Bin Stold in My abcents out of My House at Shing Springs.

MISCELLANEOUS.

LARGE FAMILIES—"PRUDENTIA" AND THE ELGIN "COURIER."

After the first outburst of indignation against a noble lord, and some other members of a learned London Society, have a little subsided, and the air is becoming still again and silent after the storm, a few small voices are beginning to protest that perhaps after all the members of the Dialectical Society may have some small amount of truth on their side, and, if so, that they should be heard calmly, and not treated as "bad men" or "naughty," which is a style of criticism not likely to convert any now-a-days, exceept, indeed, children and dependents. The members of the Dialectical—*i. e.*, some of that intelligent Society—assert, either truly or

falsely, that human beings *tend*, just like other animals, to breed far more rapidly than they can get food. And they assert, over and over again, that Mr. Malthus proved to demonstration that in America, in the United States, the population did, between the years 1790 and 1820, very nearly double itself entirely by the procreative powers of the inhabitants, and making ample allowance for immigration into the States. This being granted—and Dr. Beatty and others have not as yet attempted to assail the position—the followers of Malthus and Mill point to the fact that the increase of population in European States is always much slower than this, Great Britain having once, and only once, doubled in about fifty years, and France now being all but stationary. The inference from these *facts*, admitted by all but the ignorant, is that, as population must be checked somehow or another in old countries, it is as well for us to see that we check it in the manner which is likely to create the least suffering to mankind. Emigration is evidently quite inadequate to relieve poverty in Europe—*i. e.*, to take off the surplus that might arise if all countries were to breed as fast as they do in the United States. Emigration has been shown by Chalmers and others to be only a remedy for existing evils—not a prevention of the disease, poverty. Late marriages were recommended by Aristotle, by Plato, and recently by Malthus, and his peculiar school of theological Malthusians, such as Whately and Chalmers. The argument against late marriages is that it engenders prostitution and great and manifold vices among both sexes, ending frequently in insanity. Wars, plagues, and famine, are, of course, the very evils we are trying to get rid of. They used to be the main check to population; now they are fortunately but rare. Poverty is now the gigantic evil of our time, and the great check to population, producing early death—especially among the children of the poor—fevers, consumption, etc. The last check of population (without enumerating those dangerous ones said to be common in America at present, and which of course are not to be thought of) is what may be denominated the French Malthusian plan. That is the custom of having very small families, as is now almost universal in Paris, and in all parts of France, except in those where misery has so degraded the poor as to make them careless of everything. We have, we confess it, almost a mind to say that the French are not so far wrong, after all, in preferring comfort with two children and prudence, to misery with eight or ten.—*Medical Press and Circular.*

TOXIC ACTION OF QUININE.

Dr. Edward Garraway, of Faversham, writes to the *British Medical Journal:*

"I was called last month to a lady, aged forty, in previous good health, who had been suddenly seized with œdema of the face and limbs, accompanied by an unusual erythematous rash. She had considerable uneasiness in the præcordia, and was in a state of great alarm. Certainly there was sufficient cause, for she was greatly disfigured, and her arms felt ready to burst. Her idea was that she had been poisoned by a white powder, which she had procured at a chemist's, in mistake for quinine, and of which about a grain had been taken in a glass of wine. I taxed her with having eaten fungi, shell-fish, decomposing cheese, and other unwonted articles of food, but she pleaded guilty to none of these things. On bringing me the remains of the white powder, it proved to be pure sulphate of quinine. I repudiated the idea of this having done her any harm. After three or four days, the œdema and the rash subsided, but the skin of the face scaled off, and there was peeling of the hands and feet, as after scarlatina. My patient remaining somewhat enfeebled, I, unreflectingly, ordered a quinine mixture, by way of tonic. Two hours after taking the first dose—two grains—she sent for me, exclaiming, 'Oh, you have poisoned me with quinine again!' To my infinite chagrin and mortification, all the former symptoms recurred.

"I doubt if I have omitted prescribing quinine any day for the last twenty years—in this locality it is largely needed—and this is the first instance in which I have recognized any ill effect, beyond headache, resulting from its administration."

TASTE OF MEDICINES.

Some drugs and various salts have their taste covered or improved by the bitter infusions, which are by no means disagreeable to some palates, e. g. the bromide and iodide of potash. The sulphite of iron has its taste best covered by the infusum aurantii compos. and acid sulph. dilut., with which it is generally proper to combine it.

The tinctura ferri perchloridi is offensively rough and astringent in taste, and may be rendered an agreeable and almost elegant dose, by the addition of one or one and one-half drachm of sherry wine and an equal quantity of syrup.

The taste of nitrate of potash when dissolved in water, is tolerably covered by syrup of orange peel.

The mineral acids may be well administered by means of a graduated glass measure to which a bent glass tube is attached.—*N. Y. Medical Gazette.*

GOITRE IN SAVOY.

From the *Journal de la Societe de Statistique* of Paris, we learn that documents furnished by the Prefect of Haute-Savoie show that of the 310 communes of that province not more than 10 are exempt from goitre. The physicians of the department attribute the malady to intemperance, the unhealthiness of the villages, and the bad quality of the water drunk by the people. Endeavors have therefore been made to ascertain the effects of remedial measures upon the child sufferers from this malady, by distributing throughout the schools pastilles containing traces of iodine, by making the children drink cistern water (presumably of good quality), and by giving them a decoction of walnut-leaves. The result, so far, has been, that out of 5,000 children affected with goitre, 2,000 have been radically cured, 2,000 have shown marked improvement, and upon the remaining 1,000, the treatment had no effect whatever. It is said that, notwithstanding the lesson thus taught, parents are with difficulty induced to adopt the very simple remedies which have been found so greatly to mitigate the force of this disease.—*Lancet.*

EXCESSIVE OPIUM EATING.

Dr. A. T. Schertzer, of Baltimore, Md., relates the case of a lady, twenty-eight years of age, who had consumed in two years, *five thousand eight hundred and forty ounces* of laudanum, and spent *eleven hundred and sixty dollars* in purchasing it. Without pretending to hold her attending physician to an unjust responsibility, the question naturally occurs, as to whether or not this heroic consumption and lavish expenditure might not have been prevented by the employment of judicious means, in the first instance? Medical men should always bear in mind that this dangerous habit is easily acquired, and should guard as far as possible against it.

"While attached to the Medical Corps of the Navy," says Dr. S., "I have frequently met with the natives of the East Indies who consumed opium with a voracity equal to that of the lady in question, but have never known a similar instance in this country."—*Med. and Surg. Reporter.*

[*Continued from January No.*]

Latin Names.	English Names.	Natural Habitat.
Compositæ. (*Composite Family.*)		
I. Tubuliflorae.		
Bulbostylis, DC.,		
B. Californica, Gray.,		Dry Creekbeds.
Nardosmia, Cap.,	Sweet Coltsfoot.	
N. palmata, Hook.,		Moist Banks.
Adenocaulon, Hook.,		
A. bicolor, Hook.,		Redwoods.
Corethrogyne, DC.,		
C. incana, Nutt.,		Dry Hills.
C. filaginifolia, Nutt.,		Dry Hills.
C. tomentella, Gray.,		Dry Hills.
C. spathulata, Gray.,		Seashore.
Sericocarpus, Nees.,	White-topped Aster.	
S. rigidus, Lindl.,		Dry Banks.
Aster, L.,	Aster.	
A. Durandi, Nutt.,		Moist Banks.
A. laxifolius, Torr. & Gray.,		Hillsides.
Erigeron, L.,	Fleabane.	
E. Canadense, L.,	Horseweed.	Fields.
E. supplex, Gray.,		Coast.
E. glaucum, Ker.,		Fields.
E. glabellum, Nutt.,		Fields.
Gutierrezia, Lag.,		
G. Californica, Gray.,		Hills.
Solidayo, L.,	Golden Rod.	
S. spiciformis, Gray.,		Open Woods.
S. Californica, Nutt.,		Hillsides.
S. elongata, Nutt.,		Moist Places.
S. occidentalis, Nutt.,		Moist Banks.
Linosyris, Lobel.,		
L. arborescens, Gray.,		Redwoods.
Aplopappus, Cass.,		
A. linearifolius, DC.,		Monte de Diablo.
A. microphylla, Nutt.,		Sandy Fields.
Grindelia, Wilid.,		
G. hirsutula, Hook.,		Dry Hillsides.
G. robusta, Nutt.,		Seashore.
Pentachaeta, Nutt.,		
P. aurea, Nutt.,		Hillsides.
Chrysopsis, Nutt.,	Golden Aster.	
Ch. Bolanderi, Gray.,		Dry Hillsides.
Ch. villosa, Nutt.,		Seashore.
Aphantocheata, Gray.,		
A. exilis, Gray.,		Hillsides.
Baccharis, L.,	Groundsel Tree.	
B. consanguinea, DC.,		Hillsides.
B. Douglasii, DC..		Moist Places.
B. viminea, DC.,		Riverbeds.
Pluchea, Cass.,	Marsh Fleabane.	
P. camphorata, DC.,		Salt Marshes.

Latin Names.	English Names.	Natural Habitat.
Micropus, L.,		
M. Californicus, Fisch & Mey.,		Hillsides.
Psilocarphus, Nutt.,		
P. tenellus, Nutt.,		Hillsides.
P. globiferus, Nutt.,		Hillsides.
Stylocline, Nutt.,		
St. gnaphaloides, Nutt.,		Dry Hillsides.
Evax.		
E. caulescens, Benth.,		Hillsides.
Blennosperma, Less.,		
B. Californicum, Torr. & Gray.,		Moist Hillsides and Meadows.
Franseria, Cav.,		
F. Chamissonis, Less.,		Sandy Seashore.
F. bipinnatifida, Nutt.,		Sandy Seashore.
F. Hookeriana, Nutt.,		Sandy Seashore.
Xanthium, Tourn.,	Cockle bur.	
X. strumarium, L.,	Common Cockle bur.	Fields.
X. spinosum, L.,	Spiny Cockle bur.	Waste places.
Wyethia, Nutt.		
W. helenioides, Nutt.		Hillsides.
W. angustifolia, Nutt.,		Meadows.
W. glabra, Gray.,		Hillsides.
Balsamorhiza, Hook.		
B. macrophylla, Nutt.,		Hills.
B. deltoidea, Nutt.,		Hillsides.
Helianthus, L.,	Sunflower.	
H. Californicus, DC.,		Banks.
H. Bolanderi, Gray.,		Hillsides.
H. exilis, Gray..		Meadows.
Helianthella.		
H. Californica, Gray.,		Hillsides.
Coreopsis, L.,	Tickseed.	
C. calliopsidea, DC., ?		Moist Hillsides.
Bidens, L.. Bur.,	Marigold.	
B. chrysanthemoides,	Michx.,	Swampy Places.
Leptosyne, DC.		
L. maritima, Gray.,		Salt Marshes.
L. Douglasii, DC.,		Sandy Hills.
Pugiopappus, Gray.		
P. Bigelovii, Gray.,		Sandy Hillsides.
Chaenactis, DC.		
Ch. heterocarpha, Gray.,		Dry Hillsides.
Ch. tanacetifolia, Gray.,		Chaparral.
Ch. lanosa, DC.,		Sandy Hills.
Bahia, Lag.		
B. artemisiæfolia, Lep.,		Seashore.
B. confertiflora, DC.,		Dry Hillsides.
B. lanata, Nutt.,		Coast.
B. arachnoidea, Fisch & Mey.,		Thickets.
Lasthenia, Cass.		
L. glaberrima, DC.,		Wet Places.
L. glabrata, Lindl.,		Wet Places.

Latin Names.	English Names.	Natural Habitat.
Burrielia, DC.		
B. chrysostoma, Gray., (also var macrantha)		Hills.
B. maritima, Gray.,		Seashore.
B. tenervima, DC.,		Salinas Plains.
Dichaeta, Nutt.		
D. uliginosa, Nutt.,		Meadows.
Rigiopappus,		
R. leptocladus, Gray.,		Dry Hillsides.
Helenium, L.	Sneeze Weed.	
H. puberulum, DC.,		Wet Places.
H. Bolanderi, Gray.,		Coast Swampy Places.
Achyrachæna, Schauer.,		
A. mollis, Schauer.,		Fields.
Layia, Hook & Arn.,		
L. hieracioides, Hook & Arn.,		Hillsides.
L. carnosa, Nutt.,		Seacoast.
L. gaillardioides, Hook & Arn.,		
L. heterotricha, Hook & Arn.,		Sandy Hills.
L. platyglossa, Gray.,		Hillsides.
L. calliglossa, Gray.,		Hillsides.
L. chrysanthemoides, Gray.,		Hillsides.
Hemizonia, DC.,		
H. corymbosa, Torr. & Gray.,		Hillsides.
H. angustifolia, DC.,		Hillsides.
H. pungens, Torr. & Gray.,		Clay Soil.
H. virgata, Gray.,		Dry Valleys.
H. luzulæfolia, DC.,		Hillsides.
H. macradenia, DC.,		Hillsides.
H. rudis, Benth.,		San Jose Valley.
Calycadenia, DC.,		
C. truncata, DC.,		Dry Hills.
C. cephalotes, DC.,		Dry Hills.
Lagophylla, Nutt.,		
L. ramosissima, Nutt.,		Sandy Fields.
Madaria, DC.,		
M. elegans, DC.,		Fields.
M. corymbosa, DC.,		Fields.
Madia., Molina.,		
M. sativa, Molina var congesta.,		Fields.
M. racemosa, Torr. & Gray.,		Fields.
M. dissitiflora, Torr. & Gray.,		Fields.
Harpæcarpus, Nutt.,		
H. madarioides, Nutt.,		Dry Hillsides.
Maruta, Cass.,	May-weed.	
M. Cotula, DC.,		Roadsides.
Achillea, L.,	Yarrow.	
A. Millefolium, L.,		Fields.
Monolopia, DC.,		
M. lanceolata, var major,		Moist Meadows.
M. minor, DC.,		Hillsides.
Comogyne, Less.,		
C. carnosa, Less.,		Salt Marshes.
Matricaria, L.,	Wild Chamomile.	

Latin Names.	English Names.	Natural Habitat.
M. discoidea, DC.,		Waste Places.
Cotula, Gærtu.,		
C. coronopifolia, L		Salt Marshes.
Tanacetum, L.,	Tansy.	
T. Huronense, Nutt.,		Seashore Cliff House.
Artemisia, L.,	Wormwood.	
A. pycnocephala, DC.,		Sandhills.
A. dracunculoides, Parsh.,		Banks.
A. Canadensis, Michx.,		Fields.
A. filifolia, Torr.,		Hillsides.
A. discolor, Dougl.,		Fields.
A. vulgaris, L.,		Fields.
A. pachystachya, DC.,		Fields.
A. Californica, Less.,		Sandy Fields.
Soliva, Ruiz & Pav.		
S. daucifolia, Nutt.,		Meadows.
Gnaphalium, L.,	Cudweed.	
G. Californicum. DC., var rubrum,		Hills.
G. palustre, Nutt.,		Wet Places.
G. purpureum, L.,		Hillsides.
G. ramosissima var erubescens,		Thickets.
G. Sprengelii, Hook & Arn.,		Seashore.
Antennaria, Gaertn.,	Everlasting.	
A. margaritacea, R. Br.,		Thickets.
Filago, Tourn.,	Cotton Rose.	
F. parvula, Torr & Gray,		Fields.
Cacalia, L.	Indian Plantain.	
C. Nardosmia, Gray.		Open Woods.
Senecio, L.,	Groundsel.	
S. vulgaris, L.,		Waste Places.
S. Douglasii, DC.,		Dry Beds and Fields.
S. aronicoides, DC.,		Hillsides.
S. Bolanderi, Gray.,		Rocks, Seashore.
S. Mendocinensis, Gray.,		Meadows.
Arnica, L.,	Arnica.	
A. parviflora, Gray.,		Dry Hillsides.
A. cordifolia, Hook. var. discoidea,		Thickets.
Lessingia, Cham.,		
L. ramolosa, Gray.,		Waste Fields.
L. virgata, Gray.,		Dry Fields.
L. Germanorum, Cham.,		Dry Fields.
L. leptoclada, Gray,		Sandy Fields.
Centaurea, L.,	Star-Thistle.	
C. Melitensis, L.,		Fields.
C. solstitialis, L.,		Grain Fields.
Cirsium, Tourn.,	Thistle.	
C. undulatum, Spreng.,		Hillsides.
C. Coulteri, Harv. & Gray.,		Sandy Fields.
C. acaule, All.,		Dry Hillsides.
C. Californicum, Gray.,		Fields.
Silybum, Vaill.,		
S. Marianum, Gærtn.,		

Latin Names.	English Names.	Natural Habitat.
II. Liguliflorae.		
Calais, DC.,		
C. linearifolia, DC.,		Gravelly Hillsides.
C. macrochæta, Gray.		Fields.
C. Douglasii, DC.,		Meadows.
C. Bigelovii, Gray,		Meadows.
C. aphantocarpha, Gray,		Around Bushes.
C. cyclocarpha, Gray,		Around Bushes.
C. Bolanderi, Gray,		Grainfields and Meadows.
C. tenella, Gray,		Fields.
C. laciniata, Gray,		Meadows.
Stephanomeria, Nutt.,		
St. paniculata, Nutt.,		Hillsides.
St. virgata, Gray,		Hillsides.
Refinesquia, Nutt.		
R. Californica, Nutt.,		Gravelly Hillsides.
Hieracium, Tourn.,	Hawkweed.	
H. albiflorum, Hook,		Woods.
H. triste, Willd.		Woods.
Malacothrix, DC.		
M. Californica, DC.,		Fields.
M. obtusa, Benth.,		Hillsides.
M. incana, Gray,		Hillsides.
M. parviflora, Benth.,		Hillsides.
Crepis, L.,		
C. occidentalis, Nutt.,		Dry Hillsides.
Malacolepis, Harv. & Gray,		
M. Coulteri, Harv. & Gray,		Sandy Hills.
Macrorhynchus, Less.		
M. grandiflorus, Torr. & Gray,		Meadows.
M. heterophyllus, Nutt.,		Fields.
M. humilis, Benth.,		Fields.
M. retrorsus, Benth.,		Open Woods.
M. elatus, Nutt.,		Fields.
Sonchus, L.,	Sow Thistle.	
S. asper, Vill.,	Spring-leaved Sow Thistle,	Fields.
S. oleraceus, L.,	Common Sow Thistle.	Fields.
Hypochaeris, glabra, L., (introduced)		San Francisco.
Lobeliaceæ. (*Lobelia Family.*)		
Downingia, Torr.		
D. elegans, Torr.		Borders of Swamps.
Campanulaceæ. (*Campanula Family.*)		
Campanula, Tourn.,	Bellflower.	
C. linnæifolia, Gray,		Swampy Places.
C. prenanthoides, Gray,		Redwoods.
Heterocodon, Nutt.?		
H. rariflorum, Nutt.,		Grassy Plains.
Githopsis, Nutt.,		
G. specularioides, Nutt.,		Hillsides.

Latin Names.	English Names.	Natural Habitat.
Ericaceæ. (*Heath Family.*)		
Vaccinium, L.,	Blue berry.	
V. avatum., Pursh.,		Hillsides.
V. parvifolium, Smith,		Redwoods.
Arbutus, Tourn.,	Madrona.	
A. Menziesii, Pursh.,		Redwoods.
Arctostaphylos, Adams.,	Bearberry.	Manzanita.
A. tomentosa, Dougl.		Hillsides.
A. glauca, Lindl.,		Gravelly Plains & Hills.
A. pungens, H. B. & K.,		Hillsides.
A. nummularia, Gray,		Gravelly Plains.
Gaultheria, Kalm.,	Wintergreen.	
G. Shallon, Pursh.,		Redwoods.
Azalea, L.,	False Honeysuckle.	
A. occidentalis, Torr. & Gray,		Redwoods.
Rhododendron, L.,	Rose Bay.	
Rh. Californicum, Gray,		Redwoods.
Ledum, L.,	Labrador Tea.	
L. glandulosum Nutt.,		Coast, Swampy Places.
Pyrola, Tourn.,	Shin Leaf.	
P. rotundifolia, L.,		Thickets on the Coast.
Chimaphila. Pursh.,	Pipsissiwa.	
Ch. umbellata, Nutt.,		Thickets on Hills.
Allotropa, Torr. & Gray,		
A. virgata, Torr. & Gray,		Open Woods.
Plantaginaceæ. (*Plaintain Family.*)		
Plantago, L.,	Plantain.	
P. maritima, L.,		Seashore.
P. Bigelovii, Gray,		Hillsides.
P. Patagonica, Jacq.		
Plumbaginaceæ. (*Leadwort Family.*)		
Armeria, Willd.		
A. vulgaris, Willd. var.,		Sand Seashore—Hills.
Statice, Tourn.,	Marsh Rosemary.	
St. Limonium, L.,		Salt Marshes,
Primulaceæ. (*Primrose Family.*)		
Trientalis, L.,	Chickweed Wintergreen.	
T. *Europæa*, L.,		Thickets.
Glaux, L.,	Sea Milkwort.	
G. maritima, L.,		Seashore.
Anagallis, Tourn.,		Pimpernel.
A. arvensis, L.,	Common Pimpernel.	Fields.
Dodecatheon, L.,	Cowslip.	
D. Meadia, L.,		Hillsides aud Meadows.
Orobanchaceæ. (*Broom-Rape Family.*)		
Phelipæa, Tourn.,	Broom-Rape.	
Ph. uniflora, Gray.,		Moist Hillsides.
Ph. fasciculata, Spreng.,		Hillsides.

Latin Names.	English Names.	Natural Habitat.
	Scrophulariaceæ. (*Figwort Family.*)	
Linaria, Tourn.,	Toad-Flax.	
L. Canadensis, Spreng.,		Fields.
Scrophularia, Tourn.,	Figwort.	
S. nodosa, L.,		Moist Places.
Tonella.		
T. collinsioides, Nutt.,		Shady Hillsides.
Antirrhinum, L.,	Snapdragon	
A. glandulosum, Lindl.,		Hillsides.
A. Breweri, Gray,		Banks.
A. vagans, Gray,		Banks.
A. vagans, var., Bolanderi, Gray,		Redwoods.
Collinsia, Nutt.,	Collinsia.	
C. bartsiæfolia, Benth.,		Thickets.
C. parviflora, Dougl.,		Fields.
C. bicolor, Benth.,		Hillsides.
C. violacea, Nutt.,		Hillsides.
C. grandiflora, Dougl.,		Moist Places.
C. corymbosa, Hortu.,		Sandy Seashore.
C. solitaria, Kellogg,		Fields.
Pentstemon, Mitch.,	Beard Tongue.	
P. Menziesii, Hook.,		Rocks.
P. azurius, Benth., var.,		Sandy Banks.
P. centranthifolius, Benth.,		Sandy Hills.
Wulfenia, Jacq.		
W. reniformis, Dougl.,		Mossy Shady Banks.
Diplacus, Nutt.,		
D. glutinosus, Nutt.,		Hillsides.
Mimulus, L.,	Monkey Flower.	
M. luteus, L.,		Springy Places.
M. cardinalis, Dougl.		Borders of Streams.
M. moschatus, Dougl.,		Moist Places.
M. inconspicuous., Gray,		Moist Places.
Eunanus, Benth.,		
E. Douglasii, Benth.,		Hillsides.
E. Coulteri, Benth.,		Hillsides.
Veronica, L.,	Speedwell.	
V. Americana, Schn.,		Springy Places.
Cordylanthus, Nutt.		
C. pilosus, Gray.,		Hillsides.
C. maritimus, Nutt.,		Salt Marsh.
Castilleia, Mutis.,	Painted Cup.	
C. parviflora, Bong.,		Hillsides.
C. affinis, Hook & Arn.,		Hillsides.
C. latifolia, Hook & Arn.,		Coast.
C. foliolosa, Hook. & Arn.,		Dry Hillsides.
Orthocarpus, Nutt.		
O. pusillus, Benth.,		Meadows.
O. floribundus, Benth.,		Moist Meadows.
O. erianthus, Benth.,		Sandy Fields.
O. lacerus, Benth.,		Moist Borders.

Latin Names.	English Names.	Natural Habitat.
O. lithospermoides, Benth.,		Moist Fields.
O. faucibarbatus, Gray,		Moist Fields.
O. densiflorus, Benth.,		Moist Meadows.
O. castillejoides, Benth.,		Moist Meadows.
O. attenuatus, Gray,		Moist Meadows.
O. purpurescens, Benth.,		Moist Meadows.
Pedicularis, Tourn,	Lousewort.	
P. densiflora, Benth.,		Shady Hillsides.
P. attenuata, Benth.,		Shady Hillsides.
Verbenaceæ. (*Vervain Family.*		
Verbena, L.,	Vervain.	
V. prostata, R. Br.		Fields.
V. hastata, L.,		Water Courses.
Labiatæ. (*Mint Family.*)		
Mentha, L.,	Mint.	
M. Canadensis, L.,	Wild Mint.	Springy Places.
Lycopus, L.,	Water Horehound.	
Europæus, L.,		Borders of Streams.
Pogogyne, Benth.		
P. Douglasii, Benth.,		Dry Meadows.
P. serpylloides, Gray,		Dry Places.
Salvia, L.,	Sage.	
S. carduacea, Benth.,		Dry Hillsides.
Audibertia, Benth.		
A. grandiflora, Benth.,		Dry Hillsides.
A. stachyoides, Benth.,		Thickets.
Lophanthus, Benth.,	Giant Hyssop.	
L. anisatus, Benth.,		Sandy Banks.
Brunella, Tourn.,	Self-Heal.	
B. vulgaris, L.,		Hills near the Coast.
Scutellaria, L.,	Skull-Cap.	
S. tuberosa, Benth.,		Hillsides.
S. Bolanderi, Benth.,		Hillsides.
Monardella, Benth.,		
M. villosa, Benth.,		Dry Rocky Banks.
M. odoratissima, Benth.,		Dry Rocky Banks.
M. Breweri, Gray,		Hillsides.
Marrubium, L.,	Horehound.	
M. vulgare, L.,	Common Horehound.	Fields.
Stachys, L.,	Hedge-Nettle.	
St. ajugoides, Benth.,		Thickets.
St. Chamissonis, Benth.,		Moist Borders.
St. Nuttallii, Shuttlew,		Hillsides.
Micromeria, Benth.,	Yerba Buena.	
M. Douglasii, Benth.,		Sandy Soil.
Trichostema, L.,	Blue Curls.	
T. lanceolatum, Benth.,		Springy Places.
T. lanatum, Benth.,		Hillsides.
T. laxum, Gray,		Around Springs.
Sphacele, Benth.,		
S. calycina, Benth.,		Dry Soil.

ORIGINAL COMMUNICATIONS.

REMARKABLE CASES OF GUNSHOT WOUNDS.

By Scolly Parker, M. D., Wilmington, Cal.

J. B., aged 52, of a nervous temperament, profession, railroad engineer, had been engaged for several years on the Isthmus of Panama, had undergone great exposure to a tropical climate, and had suffered from severe and frequent attacks of malaria, which had shattered his constitution, naturally very strong and wiry. He left New York for Aspinwall in 1867, and remained there a year, during which time his general health was fair, although he was subject to cranial and facial neuralgia and occasional visitations of his old complaints, for which he was treated by the Company's physician. He had taken at different times large quantities of quinine, arsenic, morphine and iron, as prescribed by medical men, and in 1868, used morphine very frequently on his own responsibility, to quiet neuralgic pain. He was also quite intemperate in the use of liquor, although he was never known to be completely under its influence. In September, 1869, he was constantly threatening to commit suicide, but such threats were attributed by his friends to the brandy he had been drinking, and not to any deliberate intention.

On September 24th, 1868, he shot himself in the right side of the head, the ball (a No. 9, French cartridge) entering just behind the ear, taking a very circuitous course, badly shattering the petrous and mastoid portions of the temporal bone, and then moving forwards and upwards. A silver probe of the usual length was passed into the wound, but, though bent frequently and at different angles, failed to discover the missile, which, from the distorted appearance of the instrument, was supposed to have lodged near and behind the orbit. The patient lost over a pint of blood, and considerable brain matter. On being removed to the hospital, he was perfectly sensible, only regretting that his death was not immediate, and begging the doctor to give him a fatal dose of morphine. He refused at first to take the beef tea and whiskey ordered for him, but after a short time called for the latter, and until the last two (2) weeks partook freely of both. He generally lay in a half stupid condition, and appeared as if asleep, but recognized all who entered his room, and answered their questions rationally. Sight and hearing on the right side were destroyed. The movement of the jaws was not affected. He appeared to suffer very little pain. His pulse was about 60 and feeble, and secretions natural. His wound suppurated very freely and enlarged greatly, and numerous small pieces of bone, and occasionally brain matter, came away. He continued in this condition for sixty-four (64) days. For the next two weeks he was delirious, but never violently so, and for the last two (2) days of his life in a comatose condition, gradually sinking, death supervening on the eightieth (80th) day after suicide was first attempted. His treatment towards the last was bromide of potassium in drachm doses, with apparently no effect, and morphine, 3 grains at a time, which only in a slight degree calmed his ravings. On examination, a few hours after death, the ball was found half buried in the brain, and in the inner table of the squamous portion of the temporal bone, along which it had made a furrow. There was very little inflammation and softening of the brain matter in the immediate vicinity, but the posterior parts were of such slight consistency that it was impossible to remove them without their dropping to pieces. From this their almost fluid condition, and the comparative healthiness of the anterior lobes, the doctors inferred that inflammatory softening had been insidiously coming on for a considerable length of time before the injury.

The other case was that of a person shot through the heart, the ball making a furrow across both ventricles, from the apex of the right to the base of the left ventricle, just over the aortic valves where the wound was deepest. The cavities were not opened. The patient tottered across the room, lived twenty (20) minutes sensible to the last, and died of internal hemorrhage. The general effect of such wounds is instant death from paralysis of this organ.

STRANGULATED HERNIA, REDUCED—RECOVERY.

Read before the Oakland Medical Association.
By Clinton Cushing, M. D.

Patrick H., æt, 50, native of Ireland, has suffered from inguinal hernia on right side for five years, and has been compelled to wear a truss for the past two years.

On the 21st of November last, while at a mining camp in the mountains, the hernia came down and he at once begun to suffer severe pain, accompanied by vomiting.

On the 23d, he started for Oakland, where he arrived on Thursday, the 25th, and at once placed himself under the care of Dr. Van Wyck, who after considerable exertion, succeeded in reducing the hernia as far as any external appearance was concerned. In the mean time the stomach had ejected every thing it had received, and there had been no evacuation of the bowels. Doctor W. ordered hydrocyanic acid to allay the nausea, also an enema.

On Friday, the 26th, stomach was less irritable, enema had passed away as given. There was some febrile action, and patient complained of suffering much pain. Ordered the enema to be repeated with a smaller quantity of water, and acid to be continued. In the evening there being no movement of the bowels and the stomach being quiet, he took three drops of Ol Tiglii in pill form, at intervals of three hours between each drop, and retained it all night, but on Saturday morning vomited them up, together with quite a large quantity of fæcal matter, but still no movement of bowels. I saw the patient Saturday morning for the first time in consultation with Dr. Van Wyck, and after making a careful examination and detecting no external tumor, we came to the conclusion that there was a strangulation of the bowel at the internal ring, or by a portion of the omentum. There was considerable tenderness over the region of the right internal abdominal ring; pulse 108, tongue covered with a white fur.

We then gave him ¼ grain of morphia sulph., and repeated it at the end of two hours, which produced a complete relief from pain, and considerable relaxation of the system.

When fully under the influence of the opiate, we gradually threw into the colon over six quarts of warm water, with a half pint of molasses.

The fluid was retained during the administration, and afterwards, by a folded towel pressed firmly against the anus. The enema was given very slowly in order to give it an opportunity to work its way up to the obstruction.

After the administration of the enema and while it was still retained, chloroform was administered until pretty general relaxation was produced, after which the enema was allowed to pass away. Some gas and fæces were passed with it, showing that the obstruction had been relieved. He passed a comfortable night and the following day, a dose of Ol. Ricini produced a natural evacuation of the bowels, followed by entire recovery of his general health.

The points that I would call attention to, are the use of a very full enema, and the production of entire relaxation by means of morphia and chloroform, while the enema is still retained by external pressure, which in this case, was followed by so happy a result.

The end sought in the treatment was, first, the filling the gut below the stricture with water, and thus producing a certain amount of traction upon the constricted part, and second, the relaxation of the constricting part.

BIRTH OF AN ACEPHALOUS INFANT.

By John M, Willey, M. D., San Francisco.

Although the records of monstrous births are so varied and numerous that little absolutely novel is likely to be reported, it might be well to chronicle such cases as occur in our midst, if it were only as a matter of comparison with other localities. With this view, therefore, I forward a few particulars concerning a freak of nature in the development of a female infant, in which the head was entirely wanting from the foramen magnum to the floor of the orbits, the brain being represented by a fungoid mass of no great size spread over the base of the skull.

Mrs. S. was taken in labor on the 14th day of December, some three weeks in anticipation of her expected time. Everything proceeded naturally enough except the finding it impossible to make out the presentation through the membranes, which were well projected through the fully dilated os, and very tense. I thought it better to rupture them, fearing that opportunity of rectifying anything amiss might be lost in allowing the labor to proceed too far. An immense volume of liquor amnii gushed forth as the membranes gave way. In fact the bed was in a perfect flood, and over three pints were scooped up into a basin, leaving still all the bedding saturated. What surprised me, however, was to find that I was still as much in the dark as ever as to the nature of the presentation. In my effort to ascertain this, I was much impeded by the patient, who complained of something hurting her very much. A strong bony ridge with some yielding projection at one side of it was all that could be felt, but finding after a time a hand coming down, I concluded that the ridge or spine alluded to must belong to the scapula, especially as it was easy to include both extremities between the finger and thumb. These extremities, which were then transverse to the vagina, were evidently what caused the pain.

Determining that the case was one for version, I sent for chloroform and the husband of the patient went for another physician to render any assistance which might be needed. Dr. Pinching, who kindly responded to the call, arrived just in time to catch a first view of the unsightly appearance of the infant, which a few more expulsive efforts ushered into the world.

The body was that of a well developed female child, a little under the average size, but the bony framework of the head was entirely wanting above the plane of a line passing from the floor of the orbits to a little above the foramen magnum. The forehead was quite absent, and the large projecting

eyes were surmounted only by the vascular tumor which usurped the place which ought to have been occupied by cerebrum covered by skull. This vascular mass, as has been stated, was of no great depth. In fact the inequalities of the base of the skull were easily felt beneath it. In diameter also it was much less than that of the face beneath. I now discovered what had misled me in endeavoring to discover what the presentation was. Below the ears, the helices of which projected above the tumor, stood out strongly the mastoid processes of the temporal bones and a ridge of bone connected them from behind. The breadth between these points, which were those I had included between the finger and thumb, was even more in proportion than the well developed but really flabby face.

Although the heart pulsated feebly for some time, there was no effort at respiration on the part of the infant.

A female who was present, on looking at the monster, which was immediately removed into an adjoining room, exclaimed, "why, that is a monkey, does it not look just like one?" I had to admit some resemblance. "I will tell you how it was," she quickly said; "when Mrs. S. was early in the family way, she and I used to go to North Beach, and she often expressed herself as greatly disgusted with the monkeys there." "She several times asked me, as I was then well advanced in pregnancy, if I were not afraid to look at them."

Without any wish thus credulously to connect such an arrest of development as has just been described with mental impressions upon the mother, we cannot, however, afford to ignore their influence upon the formation of the *fetus in utero*. Certainly there is nothing in either parent, or in their other two comely children's appearance to give any clue to the reason why the third of their offspring should possess a form so defective.

I would observe that although the face, looked at from the eyes downward, was well enough proportioned, a profile view gave it a very simious aspect. The absence of all the top and back of the head elevated the shoulders in appearance in a very ape-like manner.

The circumstances of this case preventing any application for permission to dissect, I cannot say how far cerebral development had been arrested, but it seemed that both cerebellum and cerebrum were presented in a merely rudimentary form, if not in great part, as well as the calvarium, entirely absent.

AUTOPSIES MADE BY J. LETTERMAN, M. D. CORONER OF SAN FRANCISCO.

Reported by EDWIN BENTLEY, Assistant Surgeon, U. S. Army.

Case 17th. "Poisoning. Tobacco and Beer."

H. F., Frenchman, farmer, aged thirty-five (35) years, found dead in an alley near Pacific street.

Autopsy twenty-four (24) hours after death; robust, symmetrical physique. No external marks of violence; apex of tongue between the front teeth; rigor mortis present; diffused suggillations about the face and neck; Sectio Cadaveris.

Head. Free hemorrhage from the transverse incisions of the scalp; peri-cranium congested. On opening the superior longitudinal sinus, the blood ran in a full stream for a number of seconds; no coagulæ found in any of the vessels of the brains or membranes. The substance of the brain was very firm; and the ganglion of Ribes distinctly demonstrable; the ventricles were full of serum; and the dependent membranes retained three (3) ounces of blood.

Thorax. Lungs healthy, no pleuritic adhesions; heart normal; left ventricle empty, right side distended with fluid blood, and bled freely on opening the ventricle; body left open six (6) hours; on resuming the examination; no coagulæ were found, and on making fresh incisions, the same ready hemorrhage followed.

Abdomen. Liver congested; spleen firm and red paritoneal covering thickened; kidneys congested; bladder distended; intestines healthy; œsophagus and duodenum ligated; stomach removed. The examination revealed a vile decoction of tobacco and beer.

Case 18th. "Chronic Alcoholism."

D. D., Irishman, printer, aged thirty-five (35) years, found dead in bed at his lodging house, had been indisposed, and taking medicine some time.

Autopsy about seventeen (17) hours after death; rigor mortis strong; medium size; distinct concavity of the upper half of the sternum; no emaciation or œdema; pupils slightly dilated; Sectio Cadaveris.

Head not opened.

Thorax. Lungs adherent on the right side; gray hepatization of the upper lobe; surface covered with recent pleuritic fibrinous exudations and ten ounces of serous effusion; left lung healthy; heart normal; anti-mortem clot in the right side, left side empty.

Abdomen. Liver cirrhosed; external surface distinctly hobnailed; spleen enlarged, soft, dark, pultaceous; serous covering remarkably thickened; kidneys atrophied, granular; stomach intensely in-

flamed; intestines healthy; omentum loaded with adipose.

Case 19th. Fracture of the skull.

R. S.. alias J. R., Scotchman, stableman, aged forty-five (45) years, died in the City Prison.

Autopsy eighteen (18) hours after death; strong rigor present, pupils dilated; the body presented the appearance of a well formed muscular man; Sectio Cadaveris.

Head. No external marks; no ecchymosis or contusion could be observed over the skull; on dividing the scalp the hemorrhage was marked and the blood fluid; after removing the top of the cranium, a deep diffuse coagulæ was found pressing down the posterior portion of the left hemisphere. The brain being removed, a careful search revealed a fracture extending from the superior occipital ridge to the foramen magnum, a little to the left of the meridian line.

Thorax. Lungs crepitant and partially inflated. Post-mortem tasis in the lower lobe. Heart healthy.

Abdomen. No evidence of previous disease in the abdominal visceræ.

Case 20th. "Drowning."

A. M., Dane, coaster, aged twenty-five (25) years; found in the bay.

Autopsy a few hours after the body was received; rigor mortis strong, very little post-mortem change; pupils dilated; a well developed, muscular body; Sectio Cadaveris.

Head. Blood ran freely from the wound made in dividing the scalp; bone of the scalp very thin; visceral layer of the arachnoid and the ventricles distended with serum; brain firm; vessels well injected.

Thorax. Pleural cavities full of salt water and lungs floating on the top of it; ventricles of the heart empty; no effusion in the pericardium.

Abdomen. Stomach full of salt water; liver, spleen, pancreas and kidneys, healthy.

Case 21st. "Suicide. Opium and sulphate of copper."

F. H., German, female, ———, aged nineteen (19) years; after taking opium to destroy life, sulphate of copper in large doses, and a stomach pump were used.

Autopsy twenty-three (23) hours after death; rigor slight; body below the medium size; no external marks or emaciation.

Head. Not examined.

Thorax. Lungs, healthy, collapsed; no adhesions; very little hypostasis; heart normal.

Abdomen. Stomach, liver, spleen, and kidneys, healthy; fibrous tumor of the uterus, cysts of the fallopian tubes and ovaries.

Case 22nd. "Laceration of the spleen."

M. Q., alias M. K., Irishman, fireman, aged twenty-nine (29) years, died after an altercation at Jackson street wharf.

Autopsy twelve (12) hours after death; rigor mortis present; slight ecchymosis over the left side of the os frontis; body emits a fetid odor, and decomposition was rapidly advancing; Sectio Cadaveris.

Head. Very little bleeding from dividing the scalp; brain flaccid; sub-arachnoid spaces and ventricles distended.

Thorax. Lungs healthy; right pleura strongly adherent; heart flaccid; cavities empty; arteries healthy. The large vessels examined and traced with care.

Abdomen. Pelvis full of coagulæ; peritonium distended with serum; liver and kidneys soft and flabby; sections of the liver of a bluish lead color; spleen fourteen (14) inches in length, six (6) inches in width, and four (4) inches in thickness, exceedingly soft and pliable, very dark color, capsule very tender; the convex surface presented a deep laceration, the result of blows received just previous to death; duodenum in a state of decomposition; stomach and intestines undergoing rapid change, offensive gases predominate; had lived in a malarious district and suffered for a long time from intermittent fever.

Case 23d. "Hypertrophy of the Heart."

G. H., German, peddler, aged fifty (50) years. Found dead at his lodging-house on Commercial street.

Autopsy fourteen (14) hours after death; rigor mortis well-formed; a large plethoric cadaver; large head, slight baldness; pupils dilated.

Head. The transverse incision of the scalp bled with remarkable freedom; membranes injected and from them where the brain was removed, sixteen (16) ounces of bloody serum rapidly flowed out. The dissection of the brain exposed no lesion beyond a general congestion of the organ.

Thorax. Lungs healthy, no pleuritic adhesions; left ventricle remarkably enlarged, cavities empty, valves intact.

Abdomen. Liver congested, spleen enlarged, very red; kidneys, stomach and intestines presented no abnormal appearances.

Case 24th. "Congestion of the Brain."

E. W., Irishman, tinsmith aged thirty-four (34) years, strong muscular physique.

Autopsy thirty-six (36) hours after death; deep suggillations about the neck, shoulders and dependent parts; no external marks of violence; rigor mortis present; pupils dilated. Sectio Cadaveris.

Head. Transverse incision of scalp bled freely; also marked hemorrhage from the dependent membranes. Decided congestion of the pia mater; ventricles distended with serum; two (2) ounces of serous effusion at the base of the brain.

Thorax. Lungs healthy, slight recent adhesions posteriorly; one (1) ounce of fluid in the pericardium; valves intact; cavities of the heart empty, milk spots over the right ventricle.

Abdomen. Liver, spleen, kidneys, stomach and intestines carefully examined, without eliciting any evidences of organic lesion.

Case 25th. "Peritonitis."

E. W. H., American, lawyer, aged twenty-four (24) years; had received a blow from a stick of wood over the abdomen.

Autopsy six (6) hours after death; no rigor; purging from the nose and mouth; abdomen slightly distended and fluctuation detected; the marks of four (4) leeches over the lower third of the left rectus muscle; Sectio Cadaveris.

Head. Skull not opened.

Thorax. Lungs healthy, no pleuritic adhesions, cavities of the heart empty.

Abdomen. The intestines firmly adherent with lymph from recent peritonitis, which had terminated in effusion; over three (3) pints was removed from peritoneal cavity; mark of contusion of the upper part of the jejunum distinctly observable; liver and kidneys congested; spleen of a leaden hue; capsule presenting a withered appearance.

Case 26th. "Compression of the Brain."

P. E. K., American, teamster, aged thirty-two (32) years; died at the City and County Hospital.

Autopsy ten (10) hours after death; hemorrhage from mouth and nose; had received a blow over the head; Sectio Cadaveris.

Head. After dividing the scalp, dark blood ran freely; when the skull cap was removed the membranes were found to be intensely congested, and the left hemisphere enveloped in a large coagulæ, reaching down and filling the middle fossa of the left side. The brain being removed, the following line of fracture came readily into view, extending along the greater wing of the sphenoid bone of the left side to near the middle tursica, about two and a half ($2\frac{1}{2}$) inches in length, and reaching completely through both tables of the bone.

Thorax. Lungs and heart healthy.

Abdomen. Liver, spleen, pancreas, kidneys, bladder, stomach and intestines observed to be in an unusually healthy condition.

Remarks.—Although a distinct fracture of the skull was observable in this case, the immediate cause of death was no doubt due to the compression induced by the resisting mass of coagulæ, constituting "fracture with compression without depression."

CALIFORNIA ACADEMY OF SCIENCES.

The annual meeting of the Academy of Sciences, President Blake in the chair, was held on 3d inst.

PRESIDENT'S ADDRESS.

In offering a few remarks on the progress of the Academy, both materially and scientifically, duriug the past year, I am glad to be able to commence by informing the members that for the first time during its existence the Academy is out of debt; in fact, our finances may be said to be in a flourishing condition, for not only have we, during the past year, cleared off a debt of $700 which was owing at the begining of the year, but we have spent much more on our museum than has ever been disbursed before during the same period. In fact, we enter on the new year with a brighter financial prospect than we ever had before, so that we may now at least hope to see the day when we shall be able to occupy more commodious quarters for our meetings and for the display of our museum. In connection with this subject, I may observe that the question of exchanging our present location for more convenient rooms, has been seriously considered by the Council, but it has been thought more advisable to remain where we are until we shall have funds sufficient to enable us to fit up our museum and library in a proper manner in any new location.

I cannot omit stating in connection with this subject how much of our financial success during the past year has been due to the labors of our Treasurer, Mr. Brooks, who has most conscientiously devoted a large portion of his time to the duties of his office. From the report of the Curator of the museum it will be seen that in the department of Conchology, our collection has received important additions, principally from our former Curator, Mr. Stearns, and also from Dr. Cooper. The Herbarium has also been enriched by a valuable collection of grasses, presented by Professor Bolander, and also by a very interesting collection of plants from Humboldt County, by Dr. Kellogg. For the large amount of work that has been done in the museum we have to thank our Curator, Mr. Bloomer, Mr. Brannan, Jr., Dr. Cooper and Mr. Hanks, who have devoted a great deal of time in arranging our collections. The report of our Libra rian shows that the accessions to our library during the past year amount to — volumes, amongst them are some very interesting works, containing an account of the voyage of circumnavigation of the frigate *Novara,* fitted out by the Austrian Government for purely scientific objects.

A great deal of work has been done in the library, in endeavoring to introduce something like order in our large collection of books. They have been arranged so that the works relating to the different branches of science are placed together, and are thus more available for reference. A full catalogue has also been prepared. This useful but laborious work has been accomplished principally by Mr. Brooks and Dr. Cooper. During the past year 36 new members have joined the Academy, and although some have been lost by death and removal, we have now 135 members on our list. Amongst the most important communications that have been brought before the Society during the past year, are the very interesting observations of Professor Davidson, on ascertaining the longitude of San Francisco by means of the electric telegraph. Owing to the facilities afforded by a double line of telegraph wires from here to the Eastern States, the electric discharge was sent through a continuous circuit of more than 7,000 miles of wire—a greater distance

than had ever before been included in a single circuit. We also had a most interesting communication from the same gentleman on the last solar eclipse as observed in Alaska.

Prof. Bolander's memoir to the coniferæ of this coast is also a valuable contribution to botanical science, and Dr. Kellogg's observations on the flora of some of our northern counties, contains observations which will be most interesting to botanists. A valuable contribution to the physical geography of this continent was read before the Society by our former President, Prof. Whitney, in which he described the more marked features of the mountain ranges in Colorado Territory.

All these communications contain facts which throw new light on important branches of knowledge, nor will the light we thus diffuse be less acceptable to the scientific world, although it first radiates from a garret. During the past year the completion of the Pacific Railroad has brought us into more direct contact with the rest of the world. Amongs our visitors have been many scientific men, but unfortunately the valuable collection we possess has not been available to them on account of our not having a museum in which it can be displayed.

The establishment of an University has brought amongst us a number of scientific gentlemen; and as some of these must be zealous workers in the sciences to which they devote themselves, the Academy will undoubtedly obtain from amongst the Professors some useful and distinguished members.

The probability of the continuance of the Geological Survey of the State, which was so disgracefully interrupted by a former Legislature, is certainly a subject of congratulation, for not only does it bring amongst us a number of real scientific workers, but it removes from the State the stigma of meanness in refusing to furnish her quota to the general advancement of knowledge.

In conclusion, gentlemen, I am happy to congratulate you, not only on what has been done during the past year, but on the prospect we have before us of unusual prosperity and a larger field of usefulness, so that we may reasonably hope to see the time when the Queen of the Pacific shall occupy that position as a centre of scientific progress which her geographical and commercial advantages so clearly point out to be her destiny.

REPORTS OF OFFICERS.

Treasurer Brooks made a very satisfactory report of the state of the treasury, showing the society to be out of debt. Dr. Kellogg, Librarian, and Mr. Bloomer, Director of the Museum, also read interesting reports, giving evidence of good progress in their departments.

ELECTION OF HONORARY MEMBERS.

The following gentlemen were elected honorary members of the Society: James D. Dana, New Haven; J. Wyman, Boston; G. Engleman, St. Louis; B. Pierce, Cambridge; T. H. Huxley, London; H. M. Edwards, Paris; R. Bursley, Middleberg; Professor Hemholls, Berlin; Dr. J. D. Hooker, London.

OFFICERS OF THE SOCIETY.

The Society elected the following officers for the ensuing year: Dr. James Blake, President (re-elected); Dr. Kellogg, Vice President; Leo Eloesser, Corresponding Secretary (re-elected); H. P. Carlton, Recording Secretary (re-elected); Elisha Brooks, Treasurer (re-elected); Dr. J. G. Cooper, Librarian; H. G. Bloomer, Director of Museum.

The Society held its regular meeting on the 17th inst. J. C. Brevoort was elected corresponding member, and M. D. Bruce resident member. Mr. Harford presented specimens of fishes and crustacea from Ounalaska. Dr. Cooper presented a shell from Plover Bay, Kamschatka. The model of a mining shaft from Ballarat, Australia, was presented by H. G. Bloomer—one running down 200 feet. A plant of an unknown specie was also presented—one that germinates on the surface of the ground, very productive, and the fruit of which is eaten. A number of books from Australia were donated to the library.

Prof. Whitney finished his remarks on a survey of South Park in the Rocky Mountains, explaining the geology and flora of that region. He also read a letter from Baron Richtofen from China. Prof. Bolander exhibited some grasses of California growth and made some interesting observations upon their different species and varieties. Dr. Palmer, who is the collector of various specimens of pottery and shells from Arizona offered to the Society, gave an interesting account of the habits and customs of the Indian tribes, and of the ruins found there, as well as of the specimens of implements found in them. Prof. Carlton exhibited a number of birds and a flying squirrel from Plumas county; also 26 shells. Dr. Stout exhibited specimens of petrifactions from Fossil Hill, Nevada, looking like nuts, but really a sort of shot thrown up from volcanoes. They were hard and glass-like in the centre, and tolerably hard even on the surface; also, two stones,—round and heavy like shot—one a little larger than a boy's play-ball, the other of the size of a large cannon ball. These were from Tuolumne county, of volcanic origin, being hard lava and growing harder and harder toward the centre; not easily sawed and as heavy as lead. Dr. Stout gave an interesting account of the method of formation of these objects, which become round by the force that shoots them on high in the atmosphere, like shot from a shot-tower.

The following gentlemen were appointed Curators of the Society, to wit: Of Zoology, S. A. L. Brannan, Jr.; of Botany, H. M. Bolander; of Entomology, Henry Edwards; of Mineralogy, H. G. Hanks; and of Conchology, W. G. W. Harford.

BIBLIOGRAPHICAL NOTICES.

A Compend of Materia Medica and Therapeutics, for the use of Students. By John C. Riley, A. M., M. D., Professor of Materia Medica and Therapeutics in the National Medical College, etc., etc., pp. 370. Philadelphia; J. B. Lippincott & Co., 1869; San Francisco, A. Roman & Co.; H. H. Bancroft & Co.

This work, we are informed by the author in his preface, "is a comprehensive syllabus, embracing outline descriptions of the articles and subjects named, which the student may complete in the lecture room, or by reference to the United States Dispensatory, or to the more extended text-books on the subjects." As a text book for the student, or a handy book for the busy practitioner, this work possesses many recommendable features. When one turns to a drug, he finds a short, clear, and accurate description of its preparation and physi-

cal properties, and a positive, reliable account of its uses. No time wasted in discussing theories or citing authorities. Such the author very properly considers to be the province of "the more extended text-books on the subject."

We are particularly pleased with the concise and positive style in which he says what he has to say about a drug. The beginner cannot help but feel that he has acquired a fixed and definite knowledge of a subject. He must feel that he has an idea to start with. This we believe is the proper method to adopt in teaching every branch of our profession, our term of study is too short to teach the student every one's views on every subject. Besides he will soon enough find himself enveloped in confusion, when he has occasion to refer to the extended text-books and monographs. We can very well recollect how unsatisfactory it was to follow a lecturer, who gave us every body's view but his own, of the subject in question, and left us at the expiration of the hour without any definite idea of the subject.

Considering the book as a syllabus, or a kind of confession of faith, upon which the student is to build and elaborate, we are confident that he will find no more concise or orthodox foundation extant.

Sleep and its Derangements. By William A. Hammond, M. D., Prof. of Diseases of the Mind and Nervous System, etc., etc., pp. 318. Philadelphia; J. B. Lippincott & Co., 1869. San Francisco; A. Roman & Co., H. H. Bancroft & Co.

This book is not intended exclusively for the profession. It should be read by every intelligent man and woman. It is a subject which cannot fail to interest every thinking person, and the systematic, and scientific manner which the author handles the subject, renders the perusal of the work both pleasant and instructive. The author divides his book into twelve parts or chapters. 1. The necessity of sleep. 2. The causes of sleep. 3. The physical phenomena of sleep. 4. The state of the mind during sleep. 5. The physiology of dreams. 6. Morbid dreams. 7. Somnambulism. 8. The pathology of wakefulness. 9. The exciting cause of wakefulness. 10. The treatment of wakefulness. 11. Somnolence. 12. Somnolencia in sleep drunkenness.

In the first chapter he says: "The necessity for sleep is due to the fact that during our waking moments the formation of the new substance does not go on as rapidly as the decay of the old. The state of comparative repose which attends upon this condition, allows the balance to be restored, and hence the feeling of freshness and regeneration we experience after a sound and healthy sleep."

In the second chapter, after giving the views of many writers, ancient and modern, on the causes of sleep, and a detailed account of his own experiments on the lower animals, made to determine the causes of sleep, he says; "I think it will be sufficiently established, in the course of these remarks, that sleep is directly caused by the circulation of a less quantity of blood through the cerebral tissues than traverses them while we are awake. This is the immediate cause of healthy sleep. Its exciting cause is, as we have seen, the necessity for repair."

Though this is no new theory, yet, it is not universally accepted by physiologists. Many of them still hold that sleep is induced by hyperæmia of the brain, and do not seem to draw the line between the condition of the brain in healthy sleep and coma. Perhaps among the most careful and conclusive experiments, showing that sleep is due to diminished flow of blood to the head, are those of Dr. Fleming of Cork.

The fourth chapter—the state of the mind during sleep—is very interesting, as is every chapter, in fact, and did we not feel sure that the work would have a wide circulation, and be read by every reader of the Gazette, we would make extracts from each chapter.

A Course of Practical Chemistry, arranged for the use of Medical Students. By William Odling, M. B., F. R. S., etc. From the Fourth and Revised London edition, pp. 261. Philadelphia; Henry C. Lea, 1869. San Francisco; A. Roman & Co.

We seldom meet with a text book, so concise, and systematic. With the author's simple and clear style, and the excellent wood cuts—of which there are seventy—to illustrate the microscopical preparations and chemical apparatus, the author has made this work indispensable to the student who does not enjoy the privilege of laboratory instruction.

He divides the work into four chapters. 1. Introductory, including chemical reactions, and manipulations. 2. Analytical chemistry—blowpipe examination—solution and precipitation—examination for basis etc. 3. Toxicological chemistry—which includes the detection of mineral and organic acids, mineral, metallic and organic poisons. 4. Treats of animal chemistry—composition of tissues --normal urine—abnormal urine—urinary deposits--clinical examination of urine—urinary calculi—blood—bile, milk, bone, etc. We can recommend this work to the new beginner as the most convenient and reliable of companions. It is exactly what a text-book should be, concise, systematic, clear and comprehensible.

California Medical Gazette.

SAN FRANCISCO, FEBRUARY, 1870.

☞ *All Letters and Communications to be addressed to the* "EDITORS CALIFORNIA MEDICAL GAZETTE, *care of A. Roman & Co., San Francisco.*"

THE MEDICAL PROFESSION IN SAN FRANCISCO.

Comparing the lists of names of physicians that appear in the City Directory for the last few years, we gather some facts worthy the attention of the profession. Twelve years ago the names of persons calling themselves physicians of every description, resident in San Francisco, were collected and arranged alphabetically for the first time. The whole number was one hundred and sixty-one, of which, fifty-seven appear in the new Directory.

In 1865, the whole number of names was two hundred and forty-nine, of which number, one hundred and ten have disappeared.

In 1869, the number was three hundred and fifty-four, of which, ninety-seven have been dropped from the new Directory.

The Directory for 1870, increases the list of names to three hundred and eighty, by the addition of one hundred and twenty-three new ones, and there is at present, one physician for less than every four hundred and fifty of the inhabitants, estimating the population at one hundred and seventy thousand.

What cause is to be assigned for the migratory character of the medical portion of our population? Theirs is a profession where success can only be hoped for by persistence, and the fact that one hundred physicians should annually give up the struggle and retire to other fields, can only be accounted for on the theory that they were starved out. Unfortunately the most meritorious men are those who first feel the pressure, those who are educated to the highest sense of professional honor, and the most desirable to be retained among us, while the brazen-faced charlatan, by dint of mendacious assumptions and total disregard of the professional courtesies, which a thorough-bred physician would sooner starve than violate, soon establishes himself in a lucrative business. The exaggerated success of such continues to draw others to a field that promises so rich a harvest and the number who are constantly arriving is greater than ever before.

The consequences of this are what should be expected; never was there a place where so many desperate charlatans were pushing themselves upon unsuspecting invalids and thriving upon their fears.

The primary cause of all this disorder lies far back of the appearance of most of the present actors on the stage; in the want of proper legislation; in the general ignorance among even what are called the better classes of society, in all that relates to their physical welfare; to the persistent efforts of irregular practitioners in misrepresenting the present state of the medical art, and fostering prejudices that had their origin in errors that have long since died out. But most of all is it chargable to the apathy and demoralization of the profession itself. What ought to be expected as the necessary consequences of a want of organization? Yet the medical men of San Francisco have been unorganized for the last decade. Many of the older physicians remembering the troubles that attended the first attempt to organize the body have contented themselves to look out for their own personal interests and let the profession drift on. Men whose character and attainments qualify them for mutual friendship and co-operation, remembering some fancied wrong done in the hot blood of youth, frown coldly upon each other as they pass in their daily rounds, growing colder as their locks become whiter. If one of these is asked why this estrangement, he cannot tell!

How far they are justifiable in this is not for us to judge. "Let him that is without sin cast the first stone." Of this however, we feel assured that a medical organization is much needed, that it is a necessity that cannot be long deferred. It should be an organization that will embrace all the rational progressive men of the profession, and if the elder members decline to move, the younger ones should. An organization to be of any use, should be no less general and not composed of a clique in the interest of vain men seeking to pervert it to personal ends. Is there not public spirit among us for this? Must the young men wait till the old ones die carrying their animosities to the grave with them, before anything can be done? Young men come among us, desirous of settling here and capable of raising us as a body into higher public confidence and respect. What opportunity is afforded them to prove their qualifications and fitness to stand up as representatives of the profession? If we have no opportunity to know them and to judge, how is the public to do so, or protect themselves from imposition by the plausible-tongued quack. We do not believe that even the lowest considerations of self-interest call for the discouragement of men of talent and education from coming among us, if we are a recognized body, and they are of us, for they will elevate us all, and we would have less of the com-

plaint that is frequently made, that one does not know whom to trust. It is due to the honor of the profession, the public welfare, and as an act of justice to young men, that the profession should be organized, and no longer be voiceless.

A STATE HOSPITAL.

It is a cheering sign of advancing civilization in our State, that steps are at last being taken to establish a State Hospital. Every consideration of humanity demands that the State should provide for the indigent sick, and the charge of maintaining them should not be thrown upon the chief cities, as has been the case since California became a State. Let the reproach be taken from us, that our own unfortunate sick are the last to experience the benefits of our proverbial generosity. But why connect this hospital with the Poor House, why name a Poor House in the same Act? Is there any Poor House connected with the Insane Asylum; and with what greater propriety should it be connected with a State Hospital? Is it not a sufficient humiliation to an unfortunate and friendless man, broken down by disease, that he must accept the situation and become a public charge, or die from neglect and want, that an unnecessary stigma must be cast upon him? Are any of the great hospitals, of which we have any knowledge, so degraded? It is unworthy of a great, generous people, and our Legislators, while they look around them upon the gilded capitals and costly furniture of that edifice in which they are assembled, the astonishment and pride of the State, cannot, if they think of it, be guilty of so ungenerous an act. Give us a hospital first, a noble one, one that we can point to with the same pride that we point to our Capitol; let there be a special tax levied if necessary, to found and support it, and when that is done, consider about the Poor House, and where you shall put it, and whom you will put into it.

BAD MEAT.

A Bill is under consideration in the California Legislature, which provides for an inspector of meats sold in our markets. How much Legislation is needed in this matter will be appreciated by every citizen, could it be publicly known what impositions are practiced upon the community by the sale of bad meat, and what unlimited opportunities exist for them. It would turn the stomachs of most people against veal, to be told that from five hundred to one thousand calves that have never breathed are sold annually in the markets of San Francisco for veal. We are told on unquestionable authority, that stock cattle when driven to slaughter, consist in part of cows with young, and when these fœtuses are old enough to pass for veal, they are sent to market as the perquisites of the boys, and we have seen such meat hanging on the stalls, and acknowledged to be such, as if it were not a thing to be ashamed of.

Veal is at best unwholesome food, and the law should be so framed as to punish severely any person for killing or offering for sale calves under thirty days old.

CHLORAL HYDRATE.

Dr. Hasket Derby has been recently experimenting with this substance, and in a paper read before the Boston Society for Medical Improvement, and published in the Boston *Medical and Surgical Journal*, compares the result of his experiments with those of Liebreich. Liebreich states that, "C hloral is to be regarded as a medicine sure to bring about sleep, and free from unpleasant after effects."

It is his opinion however, that as chloral, when dissolved in water, is slightly caustic, it is contra indicated in ulceration of the mucous membranes, and probably in tuberculous affections of the larynx. In such cases he would give it by subcutaneous injection. He gave from 25 to 30 grains, which caused his patients to sleep from five to fifteen hours.

Thirty grains of the American preparation, which Dr. Derby used, had no apparent effect. In two cases where Dr. Derby gave 45 grains, the pulse fell from 80 to 70 in one case, and from 96 to 84 in the other, drowsiness in both cases coming on in fifteen minutes; natural sleep in forty-five minutes. Sleep continued in one case, two and a half hours without waking, in the other case, one hour and a quarter. In two other cases, 60 grains were given, pulse falling in one, from 120 to 90, in the other, from 90 to 60. In the first case, patient fell asleep in two hours, and slept one hour and a quarter. The second went to sleep in an hour and slept heavily for two hours. In one case, 75 grains were given, pulse 125; in half an hour's time pulse was 100, and patient asleep—an interrupted sleep continued four hours. Patients experienced no ill effects, except an occasional one complained of headache.

Thus it will be seen that Liebreich gave from 25 to 30 grains, and produced from five to fifteen hours sleep, while Dr. Derby's much larger quantity had less hypnotic power.

California Pharmaceutical Society.—We have received a report of the proceedings of the first annual meeting of this Society. The Executive Committee report to the Society that there are in the city and county of San Francisco 88 retail drug stores, and 5 wholesale establishments; that from October 1868 to October 1869, there were foreign drugs imported to the amount of about $1,000,000. The Committee also presented to the Society for consideration a "List of Queries," which, we have no doubt, will be answered in a manner that will render them of scientific interest, as well as of great practical value, to the members of the Society. For instance :

Question 1. What is the production of castor oil on this Coast? Give a description of plant, quality of product, mode of preparation, and method of cultivation best adapted to California.

[Accepted by G. G. Burnett]

3. Annual production of brandy, wines, alcohol and acetic acid in California, with descriptions of processes and other data, such as prices and qualities.

[Accepted by E. J. Richards.]

4. Give a description of the California trees from which turpentines are obtained, and a description of each kind of turpentine and mode of preparation, annual productions, etc.

[Accepted by J. G. Steele.]

6. Opium. What is the quality, quantity, etc., of the Chinese imported opium met with in San Francisco? How is the opium prepared which is used for smoking?

[Accepted by Wm. M. Searby.]

10. What are the principal chemicals manufactured in California? Give a description of the chemical works, etc.

[Accepted by H. G. Hanks.]

A NEW MEDICAL JOURNAL.

We have received No. 1., Vol. 1, of the American Journal of Syphilography and Dermatology. Edited by M. H. Henry, M. D.; to be published quarterly. Price $3.00 a year, octavo, pp. 92. The Journal presents a very neat appearance, being nicely printed on good paper.

It only requires a glance at the contents to satisfy one that the Journal is to be a first-class periodical. This number contains five original communications—1, on Syphilization, by W. Boeck, M. D.; 2, contributions to the study of congenital syphilis, by W. H. Van Buren, M. D.; 3, on serpiginous tubercular syphilide, by R. W. Taylor, M. D.; 4, on the use of the endoscope in difficult strictures of the urethra, by R. F. Weir, M. D.; 5, on urethral chancre observed with Désormeaux endoscope, by E. L. Keyes, M. D. These with the editor's introduction occupy forty pages, the remainder consists of reviews, selections from foreign journals, epitome of current literature, therapeutical notes, and bibliography.

In his article on syphilization, Boeck stigmatizes the practice as a prophylactic against syphilis, as immoral and repulsive to every medical man, and only advocates syphilization as a curative measure when the tissues have already been permeated with syphilitic virus. He says, "It is the curative inoculation that I have always used, and it is for this only, that I propose the term syphilization." In giving us his objection to syphilization as a prophylactic, he expresses no opinion as to its value, but firmly believes in it as a curative measure. He says, "I take the matter for my inoculations, whenever it is possible, from the indurated chancre. I do not object to the use of matter taken from a soft chancre, as experience has taught me that the result is the same, and I am, from my diagnostic and curative inoculations, convinced of the unicity of the virus of the two forms of primary sore."

Dr. Van Buren's article is extremely interesting, as showing how intricate and subtile are congenital diseases, and how ignorant we are of the laws which govern their transmission.

Drs. Weir's and Keyes' articles illustrate the value of the endoscope, while the selected matter is mostly translations from foreign journals, and is the more interesting on that account.

In his introduction, the editor wishes "to be understood that in the title of this journal the term syphilography is designed to comprehend, not merely syphilis, but all diseases, whether general or local, having a venereal origin or lesion." We have no doubt but that the Journal will have a wide circulation.

In the January number of the *Gynæcological Journal*, Dr. Brown of Stoneham, reports a case of tetanus following the removal of an intra-uterine tumor. "The treatment consisted in the use of ice-bags to the spine, with the exhibition of tincture of calabar bean, tincture of cannabis indica, and finally, chloric ether to relieve suffering."

Post mortem examination, "scarcely a trace of the polypus remained." The case having been read before the society, there ensued an interesting discussion as to the cause of the tetanus, viz: whether it was the removal of the polypus, or the sponge tents, which had been previously used. Dr. Storer, in speaking of the extreme rarity of the case, quoted a case of Prof. Simpson—at the time the only one on record—"of traumatic tetanus following an operation upon the unimpregnated uterus." "Dr. Storer was inclined to attach a portion of the causation to the operation, the predisposition to tetanus, perhaps, having been owing to the use of the tent."

In the same number of the *Journal*, viz—January, N. W. Hawes, demonstrator of operative dentistry in Harvard University, communicates an article on "The interdependence of diseases of the teeth and of the female pelvic organs, in which he says:

"Who can doubt the pernicious and even fatal effect of the masses of diseases that exist in some mouths, when we consider their contaminating influence over twenty thousand inspirations every twenty-four hours, of heaven's purifier to life itself, the blood or the numerous nervous disorders that arise from the teeth, too often the primary cause. Is it not startling that the medical profession pay so little attention to the teeth, and when they consider that the dental nerves are derived from those usually denominated the superior and inferior maxillary, which are the second and third branches of the fifth pair? Do we not at once perceive the intimate connection between the teeth and the whole body? It seems but necessary to call attention to the fact, and it will of itself excite prolific thought."

PNEUMONIA PREVALENT AMONG HORSES.

During the past three or four weeks a large number of horses have suffered attacks of this disease in our city, which in many instances, prove fatal. Among many of the teamsters, who have lost pretty heavily by the epidemic, an idea prevails that the disease spread from mustangs, which arrived from the interior. We notice however, that it has confined itself in great measure to the the horses that were exposed to the wet and cold—street-car horses, etc., which, however, would likely be the case, regardless of the cause. One railroad company is said to have lost 25 to 30. We do not know what method of treatment has been pursued in these cases. We know the practice among many of the best veterinary surgeons elsewhere, is to bleed freely in pneumonia. They almost never give cathartic medicine in inflammation of the lungs, and particularly object to castor oil, which they say clinical experience goes to show is one of the worst medicines that can be given to a horse.

The Physician's Hand-Book for 1870. By William Elmer, M. D., and Albert D. Elmer, M. D. New York; W. A. Townsend & Adams.

As deservedly popular as Drs. Elmer had rendered their Hand-Book, they have made a great improvement this year, by arranging two editions, one of which omits 114 pages, viz: *Index to Diseases, Classification of Diseases, Materia Medica*, etc., etc. By this omission we have a Hand-Book, small, light, and consequently convenient, and which we are sure will meet with a hearty welcome from the old friends of the Hand-Book, as well as attract many new ones from its look of lightness and neatness.

The *Western Journal of Medicine* commences its fifth volume under a new name, and new appearance. It has been removed from Indianapolis, Ind., to Louisville, Ky. It comes to us as the *American Practitioner*, with Dr. Tandell, of Louisville, associate with Dr. Parvin its former editor, as editors. It was an excellent journal before, and we have no doubt will be improved by the help of Dr. Tandell.

We have also added extra pages to this number, and will continue the extra pages while the botanic article is being published.

☞ *Readers of the* California Medical Gazette *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received and acknowledged under "Communications received."*

SURGERY.

FEMORAL ANEURISM—LIGATURE OF EXTERNAL ILIAC ARTERY—RECOVERY.

By R. T. Land, M. D., Lecturer of Anatomy in the School of Medicine, Leeds.

The case was one of aneurism of the right femoral artery occurring in a woman, aged thirty-three, a weaver. About six or seven weeks before my seeing her, the patient had much heavier pieces of cloth to lift than usual. This was followed by a weak, numb feeling in the right leg, and a difficulty in standing to such an extent that she was compelled to give up work. At this time she noticed, in the upper part of the thigh, a lump, which gradually increased in size, and to relieve the pain of which, she had recourse to frequent rubbing with the hand. There was now unmistakable distinct aneurism of the femoral artery. The skin covering it was of a bluish-white color, glazed, and very tense, and presented all the appearance of giving way externally. In conjunction with my father and my friend Mr. Jessop, it was determined to ligature the external iliac artery. This was accordingly done, under chloroform, on November 24th, 1868. Nothing unusual occurred in the course of the operation, until, after carefully dividing the various strata of the abdominal wall, it became a question whether the structure exposed was peritoneum or simply tranversalis fascia. The opinion seemed to be that the lining membrane of the abdomen had yet not been exposed, and that the structure was transversalis fascia. This was therefore slit up to the full extent of the external wound, when it was at once discovered that the peritoneal cavity was opened. The cut edges were held together by Mr. Jessop, and, without anything further untoward taking place, the operation was completed. All went on well until December 4th, when, from the patient having had a restless night or two, and considerable pain in the right hip, on which she was lying, I was induced to examine that part, and found a very large sloughing bed-sore, which had been considerably aggravated by the patient persistently urinating into the bed, and which, unknown to me, had existed before the operation. With the view to get over this

second complication, I now had the patient placed on a water-bed, and the sore dressed, in the first instance, with carbolic acid lotion, and afterwards with zinc ointment, until it was completely healed. Means were adapted to keep up and improve the general condition of the patient, and all went on satisfactorily, with the exception of one or two points which I shall presently mention, to a complete and satisfactory recovery. The ligature came away, with a little assistance, on December 31st—the thirty-eighth day.

I would now shortly draw your attention to two or three points in this case.

1. Here is an aneurism of rapid growth, occurring in a woman (a rare occurrence), and on the point of bursting externally, arrested completely by ligature above the part.

2. As to the cause of this aneurism, the woman was rather weakly looking, no history of syphilis could be made out, and it seemed to me as the patient had suffered some time from acute rheumatism, that some impairment of the nutrition of the vessel therefrom had taken place, and that the condition was excited by the increased exertion to which she was subjected, of lifting heavy pieces of cloth, using, at the same time, the right leg as a lever.

3. The slitting up of the peritoneum was done deliberately; and how this membrane was mistaken for transversalis fascia, seems difficult to understand, except that the light was bad, and the transversalis fascia not so readily distinguishable in the female as in the male. The edges of the wound were stitched together after the ligature had been placed around the vessel; and this ultimately came away through the opening in the abdominal wall. Not the slightest indication of peritonitis presented itself.

4. The complication of bed-sore was treated, in the first instance, by a lotion composed of one part of carbolic acid to eight of olive oil, up to December 14th, a period of ten days, when the patient was seized with severe bilious vomiting and pain in the epigastrium, and passed dark colored urine, noticed in cases of poisoning by carbolic acid. This dressing was, therefore, discontinued for three days, and the symptoms thus related ceased; and, with a view to ascertain whether the carbolic lotion was the cause of this disturbance, I reapplied it as before, with the same result.

5. Although the disappearance of the swelling was no doubt partly effected by absorption, yet the bulk of its removal was owing to a small valvular opening taking place in it, which gradually, and now and then, allowed the more fluid parts to drain away—I need not say, a most desirable result.

Thus, gentlemen, you will see, complications existed in this case likely enough to discourage and damp the ardor of any, more particularly of a young surgeon. Still, as each complication arose, it was grappled with, and, by the assiduous help of the nurses who had charge of the case, overcome, and the patient was restored to her friends comparitively sound and strong.—*British Medical Journal.*

CASE OF BENDING OF THE RADIUS IN AN ADULT.

By Robert Farquharson, M. D., Medical Officer to Rugby School, late Assistant Surgeon of Coldstream Guards.

On the 15th of last October, I was watching a football match on Rugby School Close, when J. S., aged eighteen, asked me to look at his right arm, which had been injured during the game. On cursory inspection, I could detect nothing far wrong; and, considering his symptoms due to a severe bruise, merely recommended rest and fomentation. Next day, he again presented himself, stating his conviction that he had bent his forearm by the accident. Naturally rather incredulous, I made a careful examination, and found that he was quite right, and that a well marked distortion really existed. Both bones were affected in some degree; but the chief strain had been experienced by the radius, which described a considerable curve, with the convexity inwards. No feeling of crepitus could be detected, nor any trace of irregularity along the margin of the bone; and motion, although attended by slight pain, was altogether unaffected. The deformity readily yielded to firm manipulation over the knee; but, as it speedily returned on the withdrawal of the force, it was necessary to apply an anterior and posterior splint.

On October 20th, the splints were removed, but the bend of the radius, though decidedly less marked, could still be observed. Reduction, if I may so call it, being effected as before, the splints were readjusted. On October 26th, on uncovering the arm this morning, it was found to have entirely regained its normal shape, a slight degree of weakness and stiffness only remaining. Since that date, it has rapidly recovered strength, and has never given rise to uneasy sensations of any kind.

Remarks.—Systematic writers on surgery insist on the great rarity of such an occurrence as the above after puberty, and even hint at its impossibility, save in connection with degeneration of the osseous tissue. But, in my patient, no such predisposing cause could exist; for he was not only stout and well developed, but of special activity in those games which most severely test the frame. We must, therefore, look upon the case as one of an exceptional nature, in which rending of a perfectly sound bone took place, irrespective of fracture; and the record of such an event may save others from the error, into which I so nearly fell, of overlooking the true nature of the injury; for, although the consequences of such an omission might not be very serious, the resulting deformity, however slight, would sooner or later have proved an annoyance, and brought discredit on the medical art. It is, therefore, fortunate that the marked way in which my attention was drawn by the lad to the nature of his lesion prevented my being led astray by the recollection of our ordinary surgical principles.—*British Medical Journal.*

TREATMENT OF PROJECTING BONE AFTER AMPUTATION.

A soldier, aged 32, of scrofulous constitution, was admitted into the military hospital at Vincennes with white swelling of the left knee. The local and constitutional symptoms demanded amputation, which Dr. Phillippe performed on June 4th, by the circular incision, at the upper third of the thigh. Two days later, inflammation of the stump set in, followed by suppuration; and sloughing was threatened. On the 9th, however, under the influence of the local application of storax ointment and quinine in powder, with nourishing food and tonic medicine, the patient's condition had greatly improved, and healthy granulations were beginning to form. Next day it was found that about three centimetres (about ½ inch) of the end of the femur projected at the upper and front part of the outer two-thirds of the stump; in the other parts, cicatrisation was in progress. Nitrate of silver was applied to the wound; and, on the 11th, Dr. Phillippe, holding with the left hand the portion of the stump corresponding to the projecting bone, dissected away the

soft parts from the bone to a depth of about two centimetres (nearly four-fifths of an inch). The skin and muscle were then drawn down over the bone, and retained in position by plasters. Very little blood was lost. Cicatrisation was complete on July 9th; the stump was formed of two well-made fleshy cushions, with a very limited deep cicatrix at the centre. A year afterwards, the patient was perfectly well. M. Phillippe says that this operation—to which he gives the name of *peromoplasty* (maiming or mutilating)—should be performed at once when the projection of the bone is noticed; and he believes that it will then be always successful. On the other hand, it is contra-indicated where the soft parts are too much retracted, when cicatrisation has advanced, or when the muscle projects too much beyond the skin.—*Gazette des Hopitaux.—British Med. Journal*

THERAPEUTICS.

THE GLYCERINE OF TANNIN.

By Meredith Clymer, M. D.

An incorrect formula for the glycerine of tannin is given in the *Medical Record*, November 1, p. 396. It is officinal in the *British Pharmacopœia* of 1867, and the directions for its preparations are; "Take of tannic acid one ounce, of glycerine, four fluid ounces. Rub them together in a mortar, then transfer the mixture to a porcelain dish, and apply a gentle heat until ample solution is effected."

Dr. Sydney Ringer first published his remarks on the employment of this preparation in *The Practitioner*, July, 1868. He says, "It appears to be but little known, and consequently but little used, while, in my opinion, it proves of great service in many diseases;" and he mentions ozœena, the reddish, sanious, or purulent discharging excoriations in the inside of the nose after scarlet fever or measles, with the consequent eczema of the upper lip; the thick, lumpy, greenish-black, often offensive discharges from the nose generally chronic and intractable; the thin, sanious, or purulent discharges from the ears in weak, unhealthy children, particularly during convalescence from long illness; the early stages of eczema, when the skin is red, tumid, and weeping; the eczema which is limited to behind the ears of children; inflammations of the throat, after the acute symptoms have subsided, and particularly in those cases where there is general relaxation of the uvula and pharynx. In his "Handbook of Therapeutics," just published, Dr. Ringer adds to the list of affections in which this combination does good.

Having used glycerine of tannin since the appearance of Dr. Ringer's paper in most of the disorders just mentioned, I can bear witness to its efficiency. I have also found that in chafing (intertrigo), both in adults and children, it gives prompter relief than any other means. It will remove almost immediately the annoying itching of puritus ani. Stuffing of the nose in syphilitic children, so characteristic and troublesome, and hindering sucking, is for a while relieved by it. In vaginal leucorrhœa it is of much and immediate service. The canal should be loosely packed with wads of cotton-wool, thoroughly moistened with it. Excoriations of the os tincæ, particularly where there is a boggy os, with a greenish-yellow, or sometimes sanious discharge, may be dressed with glycerine of tannin. After cleansing the parts, a cotton wad well saturated with the preparation is to be placed completely round the os and vaginal cervix, and another wad, moistened with glycerine, over this, the dressing to be changed every twenty-four hours. In chronic gonorrhœa and gleet, injections of glycerine of tannin, diluted from one-half to two-thirds, will often prove quickly curative. It should remain in the urethra for five minutes.

Dr. Ringer writes: "In phthisis a frequent hacking cough is often dependent on the state of the throat, and can be allayed by this application. A good night's rest may be obtained by applying the paint just before going to sleep. A small quantity of morphia, added to the glycerine of tannin, still further increases its soothing, sedative power on the throat. The paroxysms of simple, uncomplicated whooping-cough may be most considerably lessened in frequency and violence by well sponging out the pharynx; it should be carried low down, and be brought well in contact with the epiglottis and the neighboring parts. . . May be painted in the mucous membrane of the mouth inulcerative stomatitis." (A Handbook of Therapeutics, p. 221.) In throat affections, I have not found it so efficient as other astringents, and by no means agreeable to the patient, though Dr. Ringer says, "It has the further advantage of not possessing a bad taste."—*N. Y. Medical Record.*

OBSTINATE GASTRIC IRRITABILITY TREATED BY HYPODERMIC INJECTIONS.

By John Harrisson, Esq., Congleton.

James Mitchell, aged nineteen, suffered during three years from severe attacks of vomiting, which were induced by all kinds of solid food, and by all liquids. Pure water was not always rejected. Sometimes, and sometimes only, a few spoonfuls of beaf-tea, milk, or mutton-broth would not cause sickness. He was obliged to leave the table several times during each meal, and lost many dinners daily in his attempts to retain one. Excessive weakness, depression of spirits, and pallor were the obvious results of this disease He was treated by me, and by various other medical men, during his illness, without any benefit, and was for six weeks an in-patient of a large hospital, where great care was bestowed upon his diet and treatment without avail, He was fed entirely upon milk, and milk with lime-water. A teaspoonful only was given each half hour, but he did not improve.

The patient came under my notice again in June, 1868. I had just then successfully treated a most obstinate case of vomiting, consequent on pregnancy, by the hypodermic method. (*Vide British Medical Journal*, August 23d, 1868) and resolved to try the same plan with this patient. At first, one-fifth of a grain of morphia was injected; afterwards, the dose was gradually increased to one grain. At the end of a fortnight the strength of the injection was gradually diminished, and was finally discontinued in six weeks from the date of the first injection. During the period of treatment, the patient steadily improved in every respect, the vomiting ceased, he gained flesh, and was soon able to work hard as a farm laborer. Once or twice during the past year nausea and slight sickness have been felt by him, but ordinary remedies have easily removed these threatening symptoms.

TWO CASES OF ASCITES TREATED WITH COPAIBA.

Case I.—John Long, æt. 38, shoemaker, under the care of Dr. Whittell. Admitted April 20, 1869.

Had ascites, the abdomen being distended just like that of a pregnant woman at full time. At first purgatives were

given, and various diuretics were tried, but without much effect in diminishing the size of the abdomen.

Dr. Whittell had observed in the *Lancet*, February 27, 1869, a case of ascites treated by Dr. Duffin with copaiba, as recommended by Dr. Garrod. Our patient, therefore, on 13th May, was put upon 3 grain doses three times daily. In two days the urine increased in quantity from 60 oz. to 120 oz., and it went on daily increasing till he passed 150 oz. in the twenty-four hours. Of course the ascites rapidly diminished. On 22d May the medicine had to be discontinued, as it brought out an eruption resembling purpura over the whole body. As the swelling decreased, it was found that he had cirrhus of the liver and enlarged spleen, the result of ague, which he had had seven years previously in America. The patient left the hospital at his own request on 27th May, and then scarcely any fluid could be detected in the abdomen.

Case II.—Mrs. Huntley, æt 30. Under the care of Dr Phillips. Admitted April 30, 1869.

This case is still under treatment. She came in with enormous ascites. She had been tapped twice before admission, and was tapped on May 12, when thirty-two pints of serous fluid were drawn off. It was then found that she had enlargement of the liver. A variety of diuretics were given, but without acting much on the kidneys. On June 11, copaiba was given in fifteen minim doses thrice daily, and from passing only about 6 oz. or 8 oz. of water in the twenty-four hours, she passed on the 13th 24 oz., on the 14th 30 oz., and on the 16th 50 oz. Unfortunately vomiting set in, and the medicine had to be discontinued.

Remarks.—These cases are interesting, as corroborating Dr. Garrod's opinion of the diuretic properties of copaiba; and indeed Dr. Whittell states that it was used as a diurctic when he studied medicine, but it seems to have been overlooked for some time, probably on account of its nauseous taste. It is, however, wonderful how the stomach gets accustomed to it after the first few doses. Of course it will only be used when other diuretics fail, but when, as so often happens in every one's experience, all diuretics fail or lose their effect, it is very desirable to have another restored to its place on the list. The second case was a very unfavorable one for trying the remedy upon; the woman was very low and weak, and had a very irritable stomach.—*Australian Medical Journal.*

OBSTETRICS.

CASE OF TUBAL (?) PREGNANCY, GOING ON TO AT LEAST THE FULL TIME, WITH FATAL RESULT.

By G. Hogarth Pringle, M. D.

Early on the morning of the 8th inst. I was called to attend Mrs. S——, æt. 22, in her first confinement. I had been engaged to attend her some time previously, but had not hitherto seen her, owing to her having come a distance up country to be confined at the residence of her mother-in-law about nine miles from Parramatta.

I started at once, and on my arrival found my patient a remarkably cheerful young person, in, to all appearance, perfect health. I learned that from pretty accurate calculations, she believed herself to be at least ten days over her time; that about a week before she had been seized with sharp pains in the left side, supposed to be the commencement of labor, but which had quickly passed off; that her bowels had acted from castor oil the night before, and that very sharp pains, both abdominal and dorsal, had come on at 5 A. M., but had now subsided.

On examination, I found the head just at the basis of the pelvis, passages cool and moist, cervix uteri had not entirely disappeared. Os dilatable, but not dilated, admitting the point of the finger, so that I could make out one of the sutures. Pulse seventy-eight. Skin cool. I waited nearly three hours, and, as no return of the pains ensued, I left, promising to return in the evening, but enjoining them to send at once should the pains resume, as everything promised a speedy and satisfactory labor. At 6 P. M. I received a message to the effect that the pains had returned at 3 P. M., slight at first, but now becoming very severe. I reached the house about 8 P. M., when I found the pains violent, head well down in pelvis, very moveable, with plenty of room; position, occipito-anterior in left oblique diameter, right parietal eminence easily felt. Os well dilated. Full bag of membranes, which ruptured shortly after my arrival; passages cool and well lubricated.

I fully anticipated a rapid termination; but, although the pains continued regular and severe until 11 P. M., the head did not advance a hair's breadth. At this time the pains, which had hitherto been chiefly in the back, became suddenly abdominal, felt quite to the left of the umbilicus, and I now learned, for the first time, that all through her pregnancy she had suffered from severe pain in the left iliac region. I waited for another hour, when, as the pains became spasmodic with great suffering, the pulse rapidly increasing, and the patient becoming exhausted, I emptied the bladder and applied the forceps, making traction in the direction of the pelvic axis, cautiously at first, but afterwards with as much force as I dared use. The forceps (Simpson's) were applied with the greatest ease, and the head could be moved in every direction, but downwards it would not come. I then administered chloroform, believing it to be a case of hour-glass contraction, and passed my index finger without difficulty beyond the head, to ascertain if an arm twisted behind the neck could be the cause of obstruction. Finding, however, no cause except that the shoulders were tightly held above the brim, I re-applied the forceps, continuing the chloroform, but without avail. I now desisted from the use of chloroform, and, when sensibility was re-established, gave a powerful sedative, repeating it in half an hour; but, as no relief followed, I feared from the violent contractions that rupture of the uterus would ensue, I resolved at 4 A. M. to perforate and bring down the shoulders if possible. Again administering chloroform, and assisted most efficiently by Mr. Sheedy, I reduced the head, so that I could pass my hand with the crotchet up to the shoulders, which, as I expected, I found tightly grasped by a ring of uterine fibre. Passing two fingers and the crotchet through this, I brought down the body with as much gentleness as possible, and, in doing so, found that it lay quite over to the left side.

Again passing my hand to remove the placenta, I found that the uterus itself had not enlarged beyond the ordinary size of the fourth month; that the fœtus had lain in a cavity to the left, which I believe to have been the dilated fallopian tube, and at the upper side of this, at the angle of union with the uterus itself, lay the placenta, chiefly in the tubular cavity, but also partly with a portion of the membranes, probably deciduous only, in the uterine cavity. Clearing the cavity as much as possible of the clots, etc., I fixed a firm, graduated compress over the left side, with a tight abdomi-

nal bandage. Smart, but not excessive hemorrhage followed externally, but was arrested by repeatedly emptying the uterus, and inducing contraction by gently irritating the interior and applying cold.

Terrible exhaustion followed, and for four hours the patient was only kept alive by continual administration of brandy. At 10:30 A. M. she had rallied considerably, and, as all signs of flooding had ceased, I left her in the hands of Mr. Sheedy, on whose care and judgment I had good reason to depend, and he remained with her all the following night.

The next morning Mr. Sheedy came in at 8 A. M. to tell me that although alarming syncope had repeatedly come on, the patient had spent a fairly good night, had passed urine, and was in good spirits, but that towards morning symptoms had arisen that he did not like. I went out as quickly as possible to find my patient dying; no return of external hemorrhage, but constant pain in the left iliac region, with dulness on percussion as high as umbilicus, the rest of the abdomen being much distended and tympanitic, with a pulse beyond enumeration, feeble and jerking; the face pinched and anxious, and failing vision, told but too surely that internal hemorrhage was going on through the free extremity of the fallopian tube into the peritonial cavity, establishing a low asthenic form of peritonitis. I passed the catheter and drew off about six ounces of urine, administered a turpentine and assafœtida enema, and gave stimulants with styptics every quarter of an hour, but she sank rapidly, and died on the 10th at 2:30 P. M., thirty-four hours after the removal of the child.

I regret to say I could not obtain a post-mortem, but I think there can remain but little doubt as to the nature of the case or the actual cause of death. That it was not from rupture of the uterus is evident from the rounded aperture, free from any laceration, the absence of retraction of the head, or of general collapse until after the extraction of the child. It might have been a case of bicornuous uterus, with impregnation on one side only as recorded by Breschet, but this would not account for the internal flooding.

Ramsbothan remarks (page 670) that while cases of extra-uterine fœtation very rarely complete the full time, yet that when they do, the uterus, although empty, takes on all the expulsive throes of labor, just as occurred in the case now recorded.

If I am correct in my diagnosis of this case, it is perfectly unique, as I can find no mention in any obstetrical work of a case of tubal pregnancy going on to the full time and the child making its way through the uterus, and as such I have thought it worthy of record, cheerfully inviting from my professional brethren in Victoria any critical or suggestive remarks they may append.—*Australian Medical Journal.*

A CASE IN OBSTETRIC PRACTICE.

By H. Carpenter, M. D.

I was called to see Mrs. A., aged about 30, on the morning of October 9th. Upon my arrival found the following facts to exist, namely: patient almost pulseless, countenance sunken, with extreme pallor. Labor pains commenced during the early part of the evening, attended with profuse hemorrhage, which continued until my arrival. An examination of the vagina revealed the fact that labor was progressing; found the head presenting and pressing upon the soft parts, yet the pains very feeble. Gave both ergot and stimulants—the former to arrest hemorrhage and increase the pains, the latter to stimulate and increase the vigor of the system. If instruments had been at hand I should have delivered at once. However, the ergot having the desired effect, the child was expelled soon after, *still born.* Continued stimulants, and friction and warmth to the extremities. In a few minutes complained of cold followed with heat. Soon after raised up in the bed, making a violent effort to jump out, immediately falling back and expiring at once.

Query.—Was her death caused from what is termed Embolia, or from exhaustion consequent upon the loss of blood? —*Oregon Medical and Surgical Reporter.*

MISCELLANEOUS.

A PHILANTHROPIC PHYSICIAN GONE.

A true philanthropist has lately died in Richmond, Virginia. This was Dr. Lawrence Roane Waring, a good Samaritan of the medical profession, the aggregate of whose fees during the twenty years of his practice, exceeded half a million of dollars, yet the entire value of whose personal property at the time of his death, exclusive of uncollected medical fees, did not exceed $600, a sum not equaling the amount of his fees as a physician for the four or five days which preceded his last illness. The explanation is that he gave to the poor vast sums, having devoted almost his whole career as a physician to their relief, dying with no other personal property than his simple office furniture, his library, and the horses which he rode in the prosecution of his benevolent mission.

To his last resting-place in the beautiful Hollywood Cemetery, this man, without wife or children, was followed in an almost interminable procession, by his vast family the poor, and by multitudes of others who appreciated his self-denying and most unpretending goodness.

We hold up Dr. Waring as an example of a man who seems to have followed humbly in the path of Him who "went about *doing good.*" We invoke others to imitate that example as they can.—*Med. and Surg. Reporter.*

SUBCUTANEOUS INJECTION OF MORPHIA IN OBSTETRIC PRACTICE.

In an interesting paper to the Leipzig Obstetrical Society, Dr. Korman stated that he had found this very a useful practice under the following circumstances, viz: 1. During painful dilatation and expulsory periods, especially in primiparæ and in narrow pelves. 2. In spasmodic pains. 3. In painful complications of the process of labor in general. 4. In severe after pains. It is in the first category of cases that he has especially employed it, injecting one or both thighs.—*Medical Times and Gazette.*

RAILWAY CONCUSSION AS A CAUSE OF CATARACT.

The doctrine of reflex disturbances of nutrition is often illustrated by the opinions given in our law courts; but it appeared to be pushed rather to an extreme when, the other day, it was made to account for opacity of the lens. That a patient could have double incipient cataract as a direct consequence of spinal concussion, is, perhaps, somewhat improbable as far as our knowledge of causes has yet taken us. If any disturbance of the nutrition of the eyeball should

result in such connexion, the opacity of the lens would probably be a remote part of it, and by no means the single lesion. It is improbable that in such eyes any operation would be feasible. Possibly, the report of the trial which we have seen is not accurate; but, if it be so, we certainly think that the medical witnesses went beyond scientific warrant, in supporting the patient's belief that the cataracts were the consequences of the accident, and in supplying the jury with data as to the expense of their removal.—*British Med. Journal.*

PERITONEAL ADHESIONS OF THE GRAVID UTERUS A CAUSE OF POST-PARTUM HEMORRHAGE.

Dr. Graily Hewitt (*Lancet*) in a paper read before the Obstetrical Society of London, stated his belief that adhesions between the upper part of the gravid uterus and the adjacent peritoneal walls, formed not an unfrequent cause of post-partum accidents—particularly of hemorrhage, as a result of non-constriction of the womb. It was difficult enough sometimes to get the uterus to contract at all, and when drawn upward, or restrained by tough adhesions, the difficulty must be greatly increased, and as a consequence retention of the placenta and hemorrhage were liable to occur. The opinion was formed from post-mortem observations, and the practical importance of the matter, he thought, could hardly be overrated.

Dr. Williams called attention to the great advantage to be derived from the introduction into the uterus of a sponge saturated with tincture of per-chloride of iron in cases of post-partum hemorrhage.—*Medical Archives.*

RELAPSE IN ENTERIC FEVER.

In connection with the case of enteric fever followed by relapse, which was published in the *Journal* of December 25th, it is interesting to find that M. Lorain, at a recent meeting of the Hospital Medical Society in Paris, stated that he had met with two cases of relapse (*recidive*) in typhoid fever. One patient was a man aged 35, who had scarcely entered on convalescence when he was seized with all the symptoms of a fresh attack of enteric fever. The other was a young man who had accidentally remained in hospital after convalescence was fully established; he had a second attack of enteric fever, with all the characters well marked, even to the lenticular spots. In the discussion, M. Bourdon said that a young man under his care had had a relapse after enteric fever. M. Labbe had seen two well marked cases, and believed that he had on that day met with a third. Some difference of opinion was expressed as to whether such second attacks were attacks *de novo*, or a mere return of symptoms of the disease before its entire disappearance.—*Gazette des Hopitaux.*

CAUSES OF MORTALITY AMONG THE CHILDREN OF THE POOR.

In a recent inquest on the body of a child, aged nine years, Mr. Benjamin Lowne, jun., of Farringdon Dispensary, said, in evidence, "It was one of those cases in which the poor wished to get rid of their children. While they were living they wished them dead, and then they would get some one to bury them." A Juror.—"The poor are fond of their children." The Doctor.—"You do not see so much of them as I do. The poor have to support five children when they have not the means of supporting one. One half of the children of the poor die before they are three years old, while only 10 per cent. of the rich die before that age." It is clear that Mr. Lowne does not agree with the phrase, "Blessed are the poor;" and we daresay he would be found, on inquiry, to be an advocate for the small family system, so much recommended by some of our correspondents, as a cure for poverty.—*Med. Press and Circular.*

ANTHROPOLOGY.

Sir. George Grey has added to our knowledge of pre-historic human races by his description of numerous stone weapons and implements found in the Cape Colony. None of the existing races have used stone implements since the colony was founded, either iron or bone being the materials used. Dr. Leitner has lately narrated his experience of the natives of the basin of the Upper Indus; he finds them for the most part, friendly, instead of, as was supposed, of cannibal habits. A knowledge of the tribes beyond our Indian frontiers is of the utmost importance to the Indian Government. Dr. Leitner came across a remarkable Buddhist carving, representing what would be taken for the entry into Jerusalem, were it not that there is no reason to think that the facts of Christian history have ever reached this region.—*British Medical Journal.*

THE ARGENTEUIL PRIZE.

The Academy of Medicine of Paris, on the recommendation of M. Broca, have awarded the Argenteuil Prize (for improvements in the treatment of stricture) as follows: 5,000 *francs* to M. Corradi of Florence, 2,000 *francs* to MM. Mallez and Tripier, and 1,000 *francs* to M. Reliquet.—*British Med. Journal.*

SPONGE TENTS AND PERITONITIS.

Dr. Thomas said that the use of sponge tents was very liable to give rise to peritonitis, an example of which he had at present in his private practice. Last night having occasion to explore the fundus he used the tents and this morning pelvic peritonitis had set in; however, none of his cases proved fatal so far.—*Med. and Surg. Reporter.*

THE editor of the *Richmond and Louisville Medical Journal* states from personal inspection, that the prescription papers of Mr. Critchett and Dr. Morell Mackenzie, in Great Britain; of Liebreich, in Berlin; of Fauvel, Wecker, and Desmarres, in France, "bear conspicously the name, residence, and specialty of those who give them, and these papers are disseminated 'broadcast' over the cities in which these gentlemen respectively practice."—*Med. Gazette, N. Y.*

BOOKS RECEIVED FOR NOTICE.

Diseases of Children—Vogel.
Wasting Diseases of Children—Smith.
Transactions of the American Medical Association, Vol. 20, 1869.
Smithsonian Report, 1868.
Percussion and Auscultation—Hoppe.
The Nomenclature of Diseases.
A Treatise on the Diseases and Surgery of the Mouth, Jaws, and Associate Parts. By James G. Garretson.

[*Continued from February No.*]

Latin Names.	English Names.	Natural Habitat.
Boraginaceæ. (*Borage Family.*)		
Lithospermum, Tourn.,	Puccoon.	
L. hirsutum, Mey.,		Fields.
Amsinkia, Lehm.,		
A. intermedia, Fisch & Mey.,		Hillsides.
A. spectabilis, Fisch & Mey.,		Hillsides.
Eritrichium, Schrad.,		
E. Californicum, DC.,		Meadows.
E. fulvum, DC.,		Meadows.
E. Chorisianum, DC.,		Meadows.
E. plebejum, DC.,		Meadows.
Cynoglossum, Tourn.,	Hound's Tongue.	
C. grande, Dougl.,		Hillsides.
Heliotropium, Tourn.,	Heliotrope.	
H. Curassavicum, L.,		Alkaline Soil.
Hydrophyllaceæ. (*Water-Leaf Family.*)		
Eriodyction, Benth.,		
E. glutinosum, Benth.,		Dry Hillsides.
Romanzoffia, Cham.		
R. Sitchensis, Cham.,		Moist Shady Places.
Nemophila, Nutt.		
N. parviflora, Benth.,		Hillsides.
N. atomaria, Fisch & Mey.,		Thickets.
N. insignis, Benth.,		Fields.
N. pedunculata, Benth.,		Hillsides.
N. aurita, Lindl.,		Thickets.
Ellisia, L.		
E. chrysanthemifolia, Benth.,		Hillsides.
Phacelia, Juss.		
Ph. circinata, Jacq.,		Hillsides.
Ph. ramosissima, Dougl.,		Hillsides.
Ph. tanacetifolia, Benth.,		Waste Places.
Ph. malvaefolia, Cham.,		Shady Places.
Ph. ciliata, Benth.,		Hillsides.
Ph. divaricata, Benth.,		Hillsides.
Ph. loasæfolia, Benth.,		Hillsides.
Ph. Douglasii, Benth.,		Hillsides.
Emmenanthe, Benth.		
E. penduliflora, Benth.,		Hillsides.
Polemoniaceæ.		
Collomia, Nutt.		
C. grandiflora, Dougl.,		Woods.
C. gracilis, Dougl.,		Hillsides.
C. glutinosa, Benth.,		Hillsides.
Navarretia, Ruiz & Pav.		
N. leucocephala, Benth.,		Moist Places.
N. squarrosa, Hook & Arn.		Hillsides.
N. atratyloides, Hook & Arn.,		Hillsides.

Latin Names.	English Names.	Natural Habitat.
Gilia, Ruiz & Pav.		
G. densiflora, DC.,		Hillsides.
G. elongata, Steud.,		Hillsides.
G. virgata, Steud.,		Hillsides.
G. capitata, Dougl.,		Sandy Fields.
G. multicaulis, Benth.,		Hillsides.
G. tricolor, Benth.,		Open Wood & Meadow.
G. arenaria, Benth.,		Sandy Fields.
G. dichotoma, DC.,		Hillsides.
G. pharmaceoides, Benth.,		Hillsides.
G. micrantha, Steud.,		Hillsides.
G. lutea, Steud.,		Hillsides.
G. androsacea, Steud.,		Sandy Fields.
G. grandiflora, Steud.,		Hillsides.
G. ciliata, Benth.,		Hillsides.
Polemonium, Tourn.,	Greek Valerian.	
P. cœruleum, L.,		Banks.

Gentianaceæ. (*Gentian Fam.*)

Erythræa, Pers.,	Centaury.	
E. Muhlenbergii, Griesb.,		Moist Meadows.
Gentiana, L.,	Gentian.	
G. crocea, Engelm.,		Moist Meadows.
G. calycosa, Griesb., (?)		Moist Places.
Menyanthes, L.		
M. trifoliata, L.,		Swamps.

Convolvulaceæ. (*Convolvulus Fam.*)

Convolvulus, L.,	Bindweed.	
C. arvensis, L.,		Fields.
C. Californicus, Choisy.,		Banks and Fields.
Calystegia, B. Br.	Bracted Bindweed.	
C. Soldanella, R. Br.		Hillsides.
C. sepium, R. Br.,		Seashore.
Ipomæa, L.		
S. sagittata, Desf.,		Hillsides.
Cuscuta, Tourn.,	Dodder.	
C. Californica, Choisy.,		On Phacelia.
C. subinclusa, Duran & Hilg.,		Salt Marshes.

Solanaceæ. (*Nightshade.*)

Solanum, Tourn.		
S. umbelliferum, Esch.,		Thickets.
S. nigrum, L.,	Common Nightshade,	Waste Places.
Nicotiana, L.,	Tobacco.	
N. quadrivalvis, Pursh.,		Fields.

Apocynaceæ. (*Dogbane Fam.*)

Apocynum, Tourn.,	Indian Hemp.	
A. androsæmifolium, L.,	Dogbane,	Hillsides.
A. cannabinum, L., var hypericifolium	Indian Hemp,	River Banks.

Latin Names.	English Names.	Natural Habitat.
Asclepiadaceæ. (*Milkweed Fam.*)		
Asclepias, L.,	Milkweed.	
A. fascicularis, Dcne.,		Hillsides.
A. eriocarpa, Benth.,		Hillsides.
Acerates, Ell.,	Green Milkweed.	
A. cordifolia, Benth.,		Hillsides.
A. tomentosa, Torr.,		Hillsides.
Oleaceæ. (*Olive Fam.*)		
Fraxinus, Tourn.,	Ash.	
F. Oregana, Nutt.,		River Banks.
Aristolochiaceæ. (*Birthwort Family.*)		
Aristolochia, Tourn.,		
A. Californica, Gray,		Thickets.
Asarum, Tourn.,	Wild Ginger.	
A. Hookeri, Field,		Damp Places.
Chenopodiaceæ. (*Goosefoot Family.*)		
Chenopodium, L.,	Goosefoot.	
Ch. album, L.,	Pigweed.	Waste Places.
Ch. urbicum, L.,		Waste Places.
Ch. anthelminticum, L.,	Wormseed.	Waste Places.
Obione, Gærtn,		
O. leucophylla, Moq.,		
Salicornia, Tourn.,	Glasswort.	
S. herbacea, L.,		Salt Marshes.
Amarantaceæ. (*Amaranth Family.*)		
Amarantus, Tourn.		
A. blitum, L.		Fields.
A. retroflexus, L.,		Fields.
Nyctaginaceæ. (*Four o'clock Family.*)		
Abronia, Juss.		
A. umbellata, Lam.		Sandy Seashore.
A. arenaria, Menz.,		Sandy Seashore.
Polygoniaceæ. (*Buckwheat Family.*)		
Polygonum, L.,	Knotweed.	
P. aviculare, L.,	Doorweed.	Waste Places.
P. maritimum, L.,		Salt Marshes.
P. Paronychia, Cham.,		Wet Places.
P. acre, H. B. & K.,		Salinas Valley.
Rumex, L.,	Dock.	
R. maritimus, L.,	Golden Dock,	Seashore.
R. Acetosella, L.,	Sheep Sorrel,	Waste Places.
Chorizanthe, R. Br.,		
Ch. angustifolia, Nutt.,		Sandy Fields.
Ch. diffusa, Benth.,		Sandy Fields.

Latin Names.	English Names.	Natural Habitat.
Ch. pungens, Benth.,		Sandy Fields.
Ch. nudicaulis, Nutt.,		Sandy Fields.
Pterostegia, Fisch & Mey.		
P. drymarioides, Fisch. & Mey.,		Hillsides.
Eriogonum, Michx.		
E. ciliatum, Torr.,		Hillsides.
E. latifolium, Smith.,		Sea Coast.
E. parvifolium, Sm.,		Hillsides.
E. leucocladon, Benth.,		Hillsides.
E. compositum, Dougl.,		Sea Coast.
E. orthocladon, Torr.,		Dry Hillsides.
E. umbellatum, Torr.,		Rocks.
E. polifolium, Benth.,		Sandy Hills.
E. virgatum, Benth.,		Grassy Places.
E. acetoselloides, Torr.,		Grassy Places.
E. rotundifolium, Benth.,		Rocky Ravines.
Lauraceæ. (*Laurel Fam.*)		
Oreodaphne, Nees.	Laurel.	
O. Californica, Nees.,		Streams & Hillsides.
Thymelaceæ. (*Mezereum Fam.*)		
Dirca, L.,	Leatherwood.	
D. palustris, L.		Hillsides.
Loranthaceæ. (*Mistletoe Family.*)		
Phoradendron, Nutt.,	False Mistletoe.	
Ph. flavescens, Nutt., var. pubescens Englem.,		On Oaks.
Arceuthobium, Bieberst.		
A. campylopodium, Englem.,		On Pine Trees.
Saururaceæ. (*Lizard's Tail Family.*)		
Anemiopsis, Hook.,		
A. Californica, Nutt.,		Pools.
Datiscaceæ.		
Tricerastes, Presl.,		
T. glomerata, Presl.,		Along Streams.
Euphorbiaceæ. (*Spurge Family.*)		
Euphorbia, L.,	Spurge.	
E. leptocera, Englem.,		Fields.
E. crenulata, Englem.,		Hillsides.
E. Lathyris, L.,	(Naturalized.)	Monterey.
Croton, L.		
C. procumbens, Esch.,		Sandy Fields.
Eremocarpus, Bunge.,		
E. setigerus, Benth.,		Dry Valleys.
Simmondsia, Nutt.		
S. Californica, Nutt.,		Hillsides.

Latin Names.	English Names.	Natural Habitat.
Urticaceæ. (*Nettle Fam.*)		
Urtica, Tourn.,	Nettle.	
U. urens, L.,		Waste Grounds.
U. gracilis, Ait.,		Thickets.
Carryaceæ.		
Garrya, Dougl.		
G. elliptica,		Hillsides.
G. Fremonti, Gray.,		Hillsides.
G. Buxifolia, Gray.,		Swamps.
Platanaceæ. (*Plane Tree Fam.*)		
Plantanus, L.,	Buttonwood, Sycamore.	
P. racemosa, Nutt.,		Banks.
Juglandaceæ. (*Walnut Fam.*)		
Juglans, L.,	Walnut.	
J. rupestris, Englm.,		Walnut Creek.
Cupuliferæ. (*Oak Fam.*)		
Quercus, L.,	Oak.	
Deciduous. (*Fruit Annual.*)		
Qu. Lobarta Nee.,	White Oak, Burr Oak,	Valleys.
Qu. Douglasii var Gambelii, Nutt.,	White Oak.,	Gravelly Soil.
Evergreens. (*Fruit Annual.*)		
Qu. Agrifolia Nee.,	Common Live Oak.,	Valleys.
Qu. chrysolepis, Liebm.,	Mountain Live Oak.,	Hills near Coast.
Deciduous. (*Fruit Biennial.*)		
Qu. Sonomensis, Benth.,	Black Oak,	Hillsides.
Evergreen. (*Fruit Biennial,*)		
Qu. Wislizeni, Engelm.,	Live Oak,	Northern Valleys.
Qu. densiflora, Hook.,	Chestnut Oak.,	Redwoods.
The Shrubby Oaks are omitted.		
Castanea, Tourn.,	Chestnut. Chinquapin.	
C. chrysophylla, Dougl.,		Hillsides.
Corylus, Tourn.,	Hazelnut.	
C. rostrata, Ait.,	Beaked Hazelnut.,	Hillsides.
Myricaceæ. (*Sweet Gale Fam.*)		
Myrica, L.	Bayberry, Wax-Myrtle.	
M. Californica, Cham. & Schl.,		Moist Banks.

Latin Names.	English Names.	Natural Habitat.
Betulaceæ. (*Birch Fam.*)		
Alnus, Tourn,	Alder.	
A. viridis, DC.,	Green Alder,	Water Courses.
Salicaceæ. (*Willow Fam.*)		
Salix, Tourn.,	Willow.	
S. lucida, Muhl., (lasiandra Benth)		Bolinas Bay.
S. longifolia, Muhl.,		Streams.
S. Hindsiana, Benth, (S. sessilifolis, Nutt.,)		Swamps and Banks.
S. Bigelovii, Torr.,		San Francisco.
S. lasiolepsis, Benth.,		Streams.
S. Coulteri, Aud.,		Moist Places.
S. capreoides, Aud.,		Moist Places.
S. brachystachys, Benth.,		Open Woods.
Populus, Tourn.,	Poplar.	
P. monilifera, Ait.,	Cotton Wood,	Streams.
Coniferæ. (*Pine Fam.*)		
Pinus, Tourn.,	Pine.	
Leaves two in a close sheath; cones persistent.		
P. muricata, Don.,	Bishop Pine,	Hills on the Coast.
P. contorta, Dougl. (P. Bolanderi Pal ?)	Twisted Pine,	Coast.
Leaves three in a close sheath; cones persistent.		
P. insignis, Dougl.,	Monterey Pine,	Sea Coast.
P. tuberculata, Don.,		Hillsides.
P. Sabiniana. Dougl.,	Digger Pine,	Dry Hillsides.
P. Coulteri, Don.,		Hillsides.
Leaves three in a close sheath; cones falling after shedding the seed.		
P. ponderosa, Dougl.,	Yellow Pine,	Higher Hills.
Leaves five in a close sheath; cones falling after shedding the seed.		
P. Lambertiana, Dougl.,	Sugar Pine,	Highest Hills.
Picea, L.,	Fir.	
P. grandis, Dougl.,	White Fir.,	Coast Range.
Albies, L.,	Hemlock & Spruce.	
A. Mertensiana, Bong.,	Hemlock Spruce,	Northern Coast Range.
A. Douglasii, Lindl.,	Spruce,	Redwoods.
A. Menziesii, Dougl.,	Black Spruce,	Northern Redwoods.
Thuja, Tourn.,	Arbor Vitæ.	
Th. gigantea, Nutt.,		Northern Coast Range.
Libocedrus, Endl.,	Bastard Cedar.	
L. decurrens, Torr.,		Eastern Coast Range.
Sequoia, Endl.,	Redwood.	
S. sempervirens, Endl.,		Coast Range.
Torreya, Arnott,	Nutmeg.	
T. Californica, Torr.,		Redwoods.

Latin Names.	English Names.	Natural Habitat.
Cupressus, Tourn.,	Cypress.	
C. macrocarpa,	Monterey Cypress,	Coast.
C. Macnabiana, Murrey.,		Dry Hillsides.

A species of shrubby juniperus occurs sparingly on Monte del Diablo; its specific name is unknown to me.

CLASS II.—MONOCOTYLEDONOUS PLANTS.

Araceæ. (*Arum Fam.*)

Symplocarpus, Sabisb.,	Skunk Cabbage.	
S. Kamtschaticus, Bong.,		Swamps on the Coast.

Lemnaceæ. (*Duckweed Fam.*)

Lemna, L.,	Duck's Meat.	
L. trisulca, L.,		Stagnant Waters.

Typhaceæ, (*Cat Tail Fam.*)

Typha, Tourn.,	Cat Tail Flag.	
T. latifolia, L.,		Swamps.

Naiadaceæ, (*Pondweed Fam.*)

Potamogeton, Tourn.,	Pondweed.	
P. natans, L.,		Ponds.
P. pectinatus, L.,		Salt Water Marshes and Streams.
Heterostylus, Hook.		
H. gramineus, Hook.,		Marshy Places.

Alismaceæ, (*Water Plantain Fam.*)

Triglochin, L.,	Arrow Grass.	
T. maritimum, L.,		Salt Marshes.
Alisma, L.,	Water Plantain.	
A. Plantago, L., var Americanum,		Swampy Places.
A. Californica., Torr.,		Swampy Places.

Orchidaceæ, (*Orchis Fam.*)

Habenaria, Willd.,	Rein Orchis.	
H. dilatata Lindl.,		Swamps.
H. elegans, Lindl.,		Swamps.
Spiranthes, Richard.,	Ladies Tresses.	
S. gracilis, Big.,		Hillsides.
S. decipiens, Hook.,		Redwoods.
Epipactis, Hall.		
E. Americana, Lindl.,		Borders of Streams.
Corrallorhiza, Haller.,	Coral Root.	
C. striata Lindl.,		Woods.
Cypripedium, L.	Lady's Slipper.	

Latin Names.	English Names.	Natural Habitat.
C. Californicum, Gray.,		Swamps.
C. sp. ?		Redwoods.
Iridaceæ, (*Iris Fam.*)		
Iris, L.,	Flower-de-Luce.	Flag.
I. longipetala, Herb.,		Hillsides.
I. macrosiphon, Torr. & Gray.,		Hillsides.
I. Douglasiana, Herb.,		Woods.
Sisyrinchium, L.,	Blue-eyed Grass.	
S. Bermudiana, L.,		Meadows.
S. lineatum, Torr.,		Swamps.
Liliaceæ, (*Lily Fam.*)		
Trillium, L.,	Three-leaved Nightshade.	
T. sessile, L.,		Shady Places.
T. ovatum, Pursh.,		Redwoods.
Veratrum, Tourn.,	False Hellebore.	
V. fimbriatum, Gray,		Swampy Coast.
V. Californicum, Durand.,		Moist Places.
Xerophyllum, Michx.		
X. setifolium, Michx.,		Dry Hills and Plains.
Tofieldia, Huds.,	False Asphodel.	
T. glutinosa, Willd.,		Swamps.
Prosartes, Don.		
P. Hookeri, Torr.,		Thickets.
P. trachyandra, Torr.,		Redwoods.
Streptopus, Michx.,	Twisted-Stalk.	
St. amplexifolius, DC.,		Damp Thickets.
Anticlea, Kth.		
A. Fremonti, Torr.,		Hillsides.
Scoliopus, Torr.		
S. Bigelovii, Torr.,		Redwoods.
Clintonia, Raf.		
C. Andrewsiana, Torr.,		Redwoods.
Smilacina, Desf.,	False Solomon's Seal.	
S. racemosa, Desf.,	False Spikenard.	Thickets.
S. stellata, Desf.,		Shady Hillsides.
S. bifolia, Ker.,		Shady Places.
Lilium, L.	Lily.	
L. Canadense, L. var.		Moist Places.
L. Washingtonianum, Kellogg,	White Lily.	Hills.
Erythronium, L.,	Dog's Tooth Violet.	
E. grandiflorum, Pursh.,		Redwoods.
Frittillaria, L.		
F. Kamtschatcensis,		On Creeks.
F. lanceolata, Lindl.,		Shady Hillsides.
F. recurva, Benth.,		Woods.
Liliorhiza, Kellogg.		
L. lanceolata, Kellogg,		Meadows.

[*Concluded in April No.*]

RELAPSING FEVER.

By C. F. Buckley. B. A., M. D.

The object of the present article is two-fold. 1st, to awaken among our own body—should we be visited by the "New Disease," which is not at all improbable, considering our present relative position, our social condition, and the history of the malady—a spirit of extensive and careful investigation into some of the peculiarities and phenomena which must necessarily attend it. 2d, to allay as far as it reaches, any undue alarm which may arise in the public mind, from the announcements made in many of the daily papers of a "new disease" having been introduced into New York. As far as all the evidence which we have hitherto received can go, it seems beyond question that this so-called "new disease" is no other than the "Relapsing Fever" of English writers, the Famine Fever of Irish and Scotch writers, and the Hungerpest of Germany. We are at least aware that this malady prevails very extensively and with unusual fatality in London and other large towns of England at the present time, for we have the published testimony of no less an authority than Murchison to that effect. It is equally important to know that from all the information we have as yet received, the profession in New York regard it as none other, while we have the additional consolation to know that there is there, one observer at least—Austin Flint—whose acumen and experience are second to none, who has had also the advantage of witnessing one epidemic of relapsing fever already, in 1850-51, and who could consequently very readily detect any novelty the present epidemic may possess. Assuming then—an assumption, which to me seems unavoidable—that this present epidemic is really Relapsing or Famine Fever, it will be readily admitted that one of the best guides for future observation is a knowledge of all that is hitherto known on the subject. This I shall endeavor to convey briefly, necessarily omitting much that may be of no secondary importance.

According to some authorities the disease has been known ever since the days of Hippocrates, who describes some of its striking symptoms, but this statement is discredited by others on apparently sufficient grounds. It would be quite beside the object in view to discuss the question, and for all practical purposes, it is amply sufficient to know that we have at least one reliable source of authority, that it was known in Ireland during the last century. Rutty, in his "Chronological History of the Diseases of Dublin," speaking of the summer of 1793, remarks: "The latter part of July, and the months of August, September and October, were infected with a fever which was very frequent during this period, not unlike that of the autumn of the preceding year, with which compare also, the years 1741, 1745, 1748. It was attended with an intense pain in the head. It terminated sometimes in four, for the most part in five or six days, sometimes in nine, and commonly in a critical sweat. It was far from being mortal; I was assured of seventy of the poorer sort, at the same time in this fever, who, abandoned to the use of whey and God's good providence, all recovered. The crisis however, was very imperfect, for they were subject to relapses, even sometimes to the third time, nor did their urine come to a complete separation. Divers of them, as their fever declined, had a paroxysm in the evening, and in some, there succeeded pains of the limbs."

Rutty again describes the principle characteristics of the malady in his account of an epidemic in 1741. It was afterwards observed and described in different parts of the United Kingdom at different periods up to the year 1843, when it began to prevail extensively in Scotland. Even at this time it was regarded by some as a new disease, which opinion we find endorsed by the great name of Allison, for in his "Observations on the famine in the Highlands," published in Edinburgh, in 1847, he says: "The epidemic fever of 1843 is now generally admitted to have been a new pestilence hardly anywhere seen in England and not known in Scotland for that year, extending rapidly and generally throughout Scotland, but fortunately not causing in itself any great mortality." Again in 1846 and 1847, it prevailed extensively, not only throughout the United Kingdom, more especially in Ireland, but also in Silesia, and many parts of Germany. Later on, Dr. Flint in his "Clinical Reports on Continued Fever," states "The conclusion seems unavoidable that the cases of fever characterized by relapses among those which came under my observation in 1850-51, presented the distinctive traits attributed to relapsing fever, sufficiently marked to entitle them to be ranked in the class of cases which has been described by different observers as a peculiar form of continued fever." Still, more recently, Dr. Lyons, who had ample opportunities for extensive observation as "Pathologist in Chief" to the British Army in the Crimea, describes the malady as prevalent among the troops operating there during the summer of 1855. We may here state, that from '55 to the time of the present epidemic, which commenced among the Polish Jews in London last April, no well authenticated case has been reported

in the United Kingdom, and Murchison, Begbie and others have recently expressed the opinion that no true relapsing fever has occurred during this period in any locality within their knowledge.

From this brief sketch of its history it is tolerably clear that no part of the temperate zone at least is exempt from its invasions, the suitable conditions for its rise and progress given.

CAUSES.—(PREDISPOSING.)

Of these, we may unquestionably give the first place to overcrowding and destitution, and judging from its history it needs no recourse to the language of figure to describe relapsing fever as eminently the "scourge of the destitute." While sex appears to have little if any influence on its development, for of 4917 cases given in Murchison's tables, 2541 were males, and 2376 were females—Age on the contrary seems to modify considerably the liability of individuals to the reception of the poison, young people being very much more susceptible of its influence than those advanced in years, for in those tables of Murchison's previously referred to, we find that of all cases, more than two-thirds were under 30 years old, and only one-fifteenth were over 50, by far the largest percentage occurring between the ages of 10 and 25. Season appears to have no influence on its prevalence, for in all alike does it extend and develop, and if in some epidemics, as in the present, it is more widely spread in winter, the reason is obviously that greater destitution usually attends inclement seasons.

CAUSES.—(EXCITING.)

Of its contagious nature there seems at the present time to be very little doubt, though Craigie of Edinburgh, and Virchow have thought proper to dispute this point. Begbie, however, has shown that Craigie himself half admits its contagiousness, while the opinion of Virchow is not entitled to the same weight that his great name would otherwise warrant us in attaching to it, because his observation of the malady did not extend over a longer period than a fortnight in Silesia, and none of the doctors residing in the latter country concurred in his opinion. "He left Berlin for Silesia on the 20th of February, 1848, and returned to Berlin on March 10th." (Begbie.) On this question of contagiousness, Murchison advances the following propositions, of which he gives ample illustration. 1st. When relapsing fever occurs in a house or district, it often spreads with great rapidity. 2d. The prevalence of relapsing fever in single houses or in limited districts, is in direct proportion to the degree of intercourse between the healthy and the sick. 3d. Persons in comfortable circumstances, and in localities where the disease is unknown, are attacked on visiting infected persons at a distance. 4th. Relapsing fever has often been imported by infected persons into localities previously exempt. The history of the recent progress of the disease in London, seems to corroborate these statements in every particular, and the reported facts concerning its introduction into and spread in New York, are an additional confirmation of the same.

The writer cannot forbear relating a most striking case illustrating its contagiousness, told to him by his friend, Dr. Donovan, whose observations on this malady are alluded to in Murchison's Treatise on Fevers, and whose unhappy experience of it has been second to none in the United Kingdom. Under his care, in a large workhouse hospital, there was usually quite a multitude of patients with relapsing fever during the years '47-48. A friend of one female patient came some six miles from the country to visit her. The visitor staid a little while in the ward with her friend, and shortly returned to her home by the sea coast. In some four days after the visit, she fell ill with undoubted relapsing fever, for which she was attended throughout by Dr. Donovan, and not another case occurred in either direction within an area of five miles from where this woman lived.

Of its contagious nature then it seems unsafe any longer to doubt, and it is worthy of note that like most other contagious diseases, actual contact with the infected is not at all necessary for its production; for Cormack relates the fact that most of the laundry women who washed for the Infirmary in Edinburgh, during the epidemic in 1843, were attacked by it, though otherwise quite excluded from all liability to receiving the poison, and having no direct communication with the sick.

Although relapsing fever, says Murchison, is undoubtedly contagious, it is highly probable that it may be generated *de novo*, as proof whereof he adduces the fact "that after it has been entirely absent for many years it again breaks out on each occasion under precisely similar circumstances—and occasionally, as in Scotland, in 1843, without any traceable importation." From the many conditions which seem to foster both diseases in common, and the circumstances in which they spread as well as from their frequent prevalence side by side, at the same time and in the same locality, many writers have considered that relapsing fever was merely a modification of typhus, and as yet, the question is scarcely definitely settled. Lyons, Kennedy, Henderson Murchison and Jenner, among others of scarcely less note, regard them as distinct and

totally different diseases. Murchison says: "so far as I know, the statement remains uncontroverted that in all cases where fever can be proved to have been imported into a locality by a single case, typhus has produced typhus; and relapsing fever, relapsing fever." Henderson gives nine instances in which the same person contracted both fevers within a very short time. "So general was this observation in 1843, that the managers of the Edinburgh infirmary made a regulation that there should be separate wards for typhus and the "short fever." (Murchison.)

LATENT PERIOD.

Though the period of latency of relapsing fever is usually from four to ten days, cases are recorded in which its effects have been manifested much earlier. Indeed it would seem that the poison may be so concentrated that its effects may acquire complete development almost instantaneously, as in that case related by Murchison, where a medical friend of his was seized with an attack on visiting a ward where cases of this fever were under treatment.

SYMPTOMS.

"The suddenness of the invasion," says Begbie, "is characteristic of relapsing fever." The patient is instantly seized with coldness and rigors, accompanied by headache, pain in the back and loss of strength. The muscular feebleness and general prostration, however, are not at first very great, for, as Dr. Cormack has observed, "many walk long distances from the country into hospital, especially during the first days of the disease; and a still greater number of the destitute town-patients lounge about the street after their seizure and come into us on their legs." The feverishness gradually increases, while the muscular and articular pains and headache become more severe. No characteristic eruption occurs at any time, but in a large proportion of the cases there is a decided jaundice, and in others, the skin generally exhibits a bronzed hue; the skin is usually dry, though on the second or third day, profuse sweating may come on, which is not attended by any relief to the symptoms—and the temperature extremely high, varying from 102° to 107° Fahr. The pulse almost invariably exceeds 100; is generally 120 to 130, but not unfrequently 140 to 160, continuing, however, tolerably full and firm, unlike the weak and flickering pulse of typhus.

The tongue at the outset may be moist and covered with a white fur, and may so continue throughout, but in many cases it becomes brown and furred after a few days. Thirst is excessive; the appetite is often absent, at other times voracious; the bowels are constipated; nausea and vomiting are not uncommon, and the dark coffee-grounds nature of the material vomited, has induced many observers, especially Graves, to regard this disease as closely allied to, if not a particular form of, yellow fever. There is commonly tenderness over the region of the spleen and liver, and percussion and palpation of those parts indicate enlargement of both those organs. With these are associated the usual pyrexial symptoms, severe throbbing headache, accompanied often by intense pains in the muscles and joints, restlessness, sleeplessness, and occasionally delirium.

To all those symptoms, there is usually an abrupt termination on the fifth or seventh day, commonly ushered in by a profuse perspiration; sometimes by an epistaxis or other hemorrhage, or by diarrhœa, and the patient "who is one day moaning and groaning with pain," to use the language of Cormack, "is on the next at his ease and cheerful, his only complaint being of hunger and weakness."

After this crisis the patient is usually in a very hopeful state of convalescence until on or about the fourteenth day from the first seizure, when the relapse usually takes place, which is, in every respect, a repetition of the first seizure, but may be attended with greater or less severity than the former. The duration of the second seizure is usually three days, but may terminate on the second day, or be protracted till the fifth or even longer. The third seizure when it occurs, takes place usually on the twenty-first day, and others,—as many as five of which have been known to occur—succeed usually at 7 days interval.

COMPLICATIONS.

Those commonly attending relapsing fever are such as usually supervene upon all continued fevers, viz: bronchitis, broncho-pneumonia, pneumonia and pleuritis. Laryngitis requiring tracheotomy has been observed by Paterson and Begbie. Severe hemorrhages at the period of crisis; paralysis of a local nature, as well as neuralgic pains have also been observed. Diarrhœa, according to many of the Scotch physicians, has, in some epidemics, added considerably to the mortality. Of the urine, the color commonly indicates the presence of bile; the quantity is considerably reduced, while the proportion of urea is greatly diminished, or there may be total suppression of this secretion with the usual consequences of this condition. Miscarriage among pregnant females attacked, is almost invariable, the exceptions being very few, while the fœtus, at whatever age it may be, has not hitherto been known to have been born alive. Ophthalmia also, presenting two distinct stages, the amaurotic and inflammatory,

has been observed as a sequel of this malady, and described by Mackenzie of Glasgow, as "post-febrile ophthalmia."

MORBID ANATOMY.

On this division of the subject, Begbie says: "Unlike what holds true of pythogenic or enteric fever, there is no constant or invariable morbid appearance to be detected. Nevertheless, there are a few thoroughly ascertained facts in regard to this subject, which, in the not unlikely event of another epidemic of relapsing fever, should form the groundwork for renewed and still more extended investigation. The spleen is almost always found altered; enlargement and engorgement of the liver, without any structural change—even as has been specially pointed out by Cormack and others—in the best marked "yellow cases" have generally been found. The blood when subjected to microscopic examination has revealed an increased number of white corpuscles, similar to what occurs in the condition of Leukæmia." It is indeed highly probable also, that the volumetric analysis of the urine in the various stages of the disease, may lead to very interesting and important results.

PROGNOSIS.

As regards its prognosis, relapsing fever cannot be said to be on the whole, a very fatal disease, the mortality in all epidemics hitherto recorded, being much less than in either typhus or typhoid. According to Murchison's computation from the records of the United Kingdom, there were 672 deaths in 14,119 cases attacked, *i. e.* 4.75 per cent. According to Simon, the last epidemic in Russia, which for some time, was known as the Plague, owing to the fact of the lymphatic glands being commonly enlarged, was attended with somewhat greater mortality, and judging from the imperfect accounts which have as yet reached us, the present epidemic appears to be still more fatal. Age and previous habits, like in all adynamic epidemics, considerably influence the rate of mortality. Of six deaths during the previous week, reported in the *Times*, of January 19th, the ages were 66, 59, 64, 45, 3 and 5, respectively. Death may occur suddenly from fatal syncope; from coma induced by impaired action of the kidneys; from either of the thoracic complications already alluded to; or from convulsions, as in the latter two of the deaths recorded in the *Times*, and taken from the Registrar General's Report.

PREVENTION.

It is now beyond question that there is at least an intimate connection—if they do not stand in the relation of cause and effect, as so high an authority as Sir D. Corrigan believes—between relapsing fever and extreme destitution, and consequently, the amelioration of the condition of the poor, especially as regards nourishing diet in sufficient quantity, is the first step towards its prevention in any community. That it is contagious also, there can be no doubt, and it must follow that isolation, as far as possible, of those already affected, becomes an essential item towards checking or retarding its progress.

TREATMENT.

As regards medication, ipecachuanha in emetic doses is reported to give considerable relief from the distressing pains usually experienced in the abdomen. Diuretics, especially the salts of potash, have been given with very beneficial results in all cases complicated with head symptoms. The same considerations which regulate the administration of nourishment and stimulants in other fevers, hold good in relapsing fever, and the thoracic symptoms should be treated on general principles, always bearing in mind that a large majority of all cases were previously ill-nourished. Antiperiodics—as they are called—such as berberine, salicine, arsenic, and quinine have all been extensively and faithfully tried to ward off a relapse, but to no purpose. In the ophthalmia following the disease, bleeding, succeeded by calomel and opium, has been very cogently recommended by Anderson of Glasgow, but it must at least be said that the practice seems opposed to that of nearly all oculists of the present day, and quite contrary to what the nature of the malady that induced it would lead us to anticipate.

CURIOUS CASE IN OPHTHALMIC PRACTICE.

By Geo. H. Powers, M. D.

I give you the notes of a singular case which I saw a year ago, it being altogether a unique one in my field of observation. The patient was a sailor, twenty-two years of age, born on Long Island, and his eyes have been in their present state since his earliest recollection. The condition of the two eyes is very nearly the same, as follows: 1st. Cornea appears very small, about one-half the normal size, the conjunctiva projecting over it on all sides, so as to produce this effect. 2d. The iris is very tremulous, and the anterior chamber deep. 3d. The pupils are displaced upwards and outwards, almost concealed under the fold of conjunctiva above mentioned. He can read, without glasses, No. 8 of Jæger's test-types at 7 inches distance with the right eye; with the left, only No. 14 at about 4 inches; more distinct vision is gained by use of four-inch convex lens.

He has one brother whose eyes are said to be similarly conditioned, but his parents and other relations have normal eyes. He has been employed as a sailor for several years, and considers himself an "able-bodied seaman," having applied to me out of curiosity merely, to know if by any means his eyes could be made like those of other people. I suppose there may have been congenital absence of the lens, but am not sure of it, as vision was too acute for such a condition. How to account for the other phenomena, I do not know.

AUTOPSIES MADE BY J. LETTERMAN, M. D. CORONER OF SAN FRANCISCO.

Reported by EDWIN BENTLEY, Assistant Surgeon, U. S. Army.

Case 27th. "Peritonitis from incised wound."

A. G., Russian, boatman, aged thirty (30) years. In a personal encounter, received a wound in the abdomen, with which he was admitted to St. Mary's Hospital.

Autopsy eight (8) hours after death. Purging from the nose and mouth; no rigor. Pupils dilated; bowels tympanitic; Sectio Cadaveris.

Head. A few drops of blood followed the division of the scalp; membranes anemic; brain exceedingly flaccid; cerebral vessels partially filled with blood; pons varolii remarkably soft and easily broken down. An ounce of bloody fluid at the base of the brain.

Thorax. Lungs and heart healthy; cavities of the latter empty.

Abdomen. A punctured wound an inch in length over the left ilium, passing directly inwards and upwards, making seven (7) perforations in the ilium, piercing both sides of the intestine in three places. Peritoneal cavity inflated with offensive gases; fæces in the pelvis; intestines adherent, and covered with a recent layer of lymph; ten ounces of serum effused.

Case 28th. "Homicide. Wound by pistol ball. Peritonitis."

D. McG., Irishman, grocer, aged forty-three (43) years, of full plethoric habit, possessed a robust constitution, had never been sick.

Autopsy twenty-four (24) hours after death. Purging from nose and mouth; sanguineous discharge from wound in the abdomen; rigor mortis strong; pupils dilated; dark suggillation over the dependent parts; Sectio Cadaveris.

Head not examined.

Thorax. Lungs inflated; no adhesions; right side of the heart distended with post mortem clots; left side empty; valves intact.

Abdomen. An examination of the abdomen exposes two wounds from pistol ball; one of entrance at the outer edge of the right rectus abdominalis mureb, at a point midway between the umbilicus and the cartilage of the seventh rib. The wound of exit midway between the centre of the crest of the left ilium and the point of the lower rib. The ball passed through the omentum, and entering the gajunum, cut away two-thirds of its circumference for the space of two inches; very little hemorrhage; no coagulæ. A severe peritonitis had developed in twenty-four (24) hours.

Case 29th. "Suicide—strychnine."

L. E. H., American, book-keeper, aged forty-seven (47) years; married; was an habitual toper; had threatened suicide repeatedly; had frequently remonstrated against himself, and made resolutions to reform; died away from home.

Autopsy twenty (20) hours after death; no rigor, and no indications of the previous existence of tetanic spasms. Body apparently well nourished, and of a livid hue; deep suggillations about the face, neck and dependent parts; pupils normal, and no observable contortions of the muscles of the face; Sectio Cadaveris.

Head. Dark blood flowed freely from the usual transverse incision of the scalp; skull very thin; superior longitudinal sinus empty; membranes anemic; cerebral arteries dilated; brain flaccid; pachionian glands prominent; diffuse serous effusions raising the arachnoid from the convolutions; vessels of the pia mater injected.

Thorax. Lungs engorged with blood; no adhesions; heart flaccid; no coagulæ.

Abdomen—Stomach. Liver fatty, edges rounded as in cirrhosis; spleen firm, very small, weighing less than half an ounce; kidneys congested; intestines healthy; bladder empty and contracted.

Case 30th. "Tuberculous Consumption."

H. M., German, watchmaker, aged thirty-five (35) years, found dead at his lodgings.

Autopsy thirty-six (36) hours after death. No rigor mortis present; great emaciation; pupils dilated; no external marks; Sectio Cadaveris.

Head not opened.

Thorax. Clavicles prominent; sterno-clavicular articulation admits of free motion; lungs strongly bound down by pleuritic attachments. The upper lobes were found involved in large vomica, which communicated with the bronchi, and admitted of the free expectoration of purulent matter; lower lobes and middle lobe consolidated by the deposit of gray and yellow tubercle, in the various progressive stages of development, so that scarcely a cubic inch of gland remained unveiled to perform the function of this important organ; heart flaccid; atrophied cavities empty; valves healthy.

Abdomen. Liver relatively hypertrophied; not fatty; spleen, pancreas and kidneys healthy; stomach contracted; intestines empty; descending colon less than one-third of an inch in diameter; mesenteric glands enlarged, thin and pale. All the viscera presented a general anemic condition.

Case 31st. "Parenchymatous Nephritis."

D. W., American, agent, aged fifty-seven (57) years, a reputed "hard drinker," died suddenly while sitting in a store in this city. Had previously complained of indigestion, lassitude and debility.

Autopsy eighteen (18) hours after death; rigor mortis present; no external mark; no œdema of limbs; no remarkable emaciation; Sectio Cadaveris.

Head. No hemorrhage from the scalp. On removing the calvaria, the pacchionian glands appear in diffuse clusters along the line of the superior longitudinal sinus. The sub-arachnoidian layer adherent to the pia mater, to which they were attached by a dense deposit of yellow connective tissue, binding together the visceral and reflected layer of the arachnoid along the median line; the substance of the brain, of increased consistence.

Thorax. Lungs collapsed and healthy; no adhesions; left ventricle of the heart enlarged; cavities empty; no valvular disease.

Abdomen. Liver enlarged and fatty; stomach and intestines, pancreas and spleen healthy; kidneys in the third stage of parenchymatous nephritis; surface distinctly granular; marked atrophy of the cortical portion.

Case 32d. "Thoracic Aneurism."

W. T., Scotchman, carpenter, aged sixty-two (62) years. Has had a dry cough and a dull, heavy pain in the chest. The evening before his death, he complained of a jerking sensation in the throat.

Autopsy ten (10) hours after death; rigor mortis well formed; heat remaining in the body; pupils not dilated; well developed physique; no external marks; Sectio Cadaveris.

Head. Transverse incision of scalp bled freely; no clots in the sinuses of the brain; membranes anemic; brain very white, and of increased consistence.

Thorax. Lungs collapsed; left lung floating in three (3) pints of serum; three (3) pints of coagulæ in the left pleura; aneurismal sac two inches in diameter; lenori in the aorta just below the arch; heart collapsed; cavities empty; calcareous plates extending along the thoracic aorta.

Abdomen. Abdominal organs presented no evidence of disease.

Case 33d. "Drowning."

J. K., Irishman, expressman, aged thirty-three (33) years, found floating in the Bay; has been married a week; known to have been of very intemperate habits; was intoxicated when last seen.

Autopsy made soon after the body was found. Decomposition had commenced; face cut and bones fractured; skull partially macerated; Sectio Cadaveris.

Head not opened.

Thorax. Lungs collapsed; no adhesions; two ounces of reddish fluid in the left pleural cavity; none in the right; heart flaccid; cavities empty.

Abdomen. Stomach empty; viscera normal; very slight post mortem changes in the internal organs.

Remarks.—The striking contrast which this case presents to case 20, reported in the February number, will be observed, and may be received in support of the early opinion of the profession, viz.: When a person falls into the water alive, in their struggles, water will be freely swallowed, and more or less will pass into the lungs and pleura by the air passages. When a dead body falls or is thrown into the water, or a body unconscious from drunkenness, fits, or other cause, no resistance will be made, and water will not therefore be received into the stomach or chest. The water finds a natural passage to the stomach, of course, when found within the plural sac. A lesion of structure in the lungs is implied, as in pneumo-thorax, when no external wounds exist.

Case 34. "Cancer of the Dura Mater."

L. B., Prussian, cook, aged forty-three (43) years, died on board a schooner laying in the Bay. He had been subject to severe convulsions.

Autopsy twenty-four (24) hours after death; rigor mortis present; no external marks; medium size; no emaciation; Sectio Cadaveris.

Head. Slight hemorrhage, induced by raising the scalp. Caries observed of the internal and posterior portions of the parietal bones, for an inch in diameter. On removing the top of the skull, this portion of bone was found to be partially absorbed, and under the remaining necroid part, a scirrhus tumour, two inches in diameter. Brain pale; cerebral vessels partially filled, otherwise normal.

Thorax. Lungs healthy; no adhesions; no tubercles; heart collapsed, and its cavities filled with dark fluid blood.

Abdomen. Stomach and intestines, liver, spleen, pancreas and kidneys healthy.

Case 35. "Foreign body in the Larynx."

J. M. H., a boy eleven (11) years old, born in New Haven, Connecticut, employed as a waiter in a restaurant. After partaking of meat, was suddenly

attacked with vomiting, in which he instantly died; had always enjoyed good health.

Autopsy eleven (11) hours after death; rigor well formed; symmetrical figure; deep suggillations about the face, neck and left arm; upper eyelids corrugated; mouth closed; apex of the tongue between the teeth; right jugular vein very prominent; Sectio Cadaveris.

Head. Free hemorrhage from the wound made in dividing the scalp; membranes of the brain congested; pia mater very dark; effusion of serum in the arachnoid; pacchyonian bodies very prominent and imbedded in yellow connective tissue.

Thorax. Lungs congested; heart rigid; fluid blood in the cavities. In the larynx was found a large bolus of beef, which had been brought from the stomach to the favus, in the act of vomiting, when a deep effort at inspiration drew it over the epiglottis, where it lodged, producing instant death by suffocation.

Abdomen. All the organs healthy.

Case 36. "Drowned."

W. L., German, tailor, aged thirty (30) years. While bathing at North Beach, as was his habit, being an excellent swimmer, his struggles to return when quite a distance from the shore were not regarded as serious. His utmost efforts were overpowered by the currents which enveloped him. His body was found on the following day.

Autopsy forty-eight (48) hours after death; well nourished; well developed physique; cadaveric rigor present; thighs partially flaced; hands clenched; sand adhering to the fingers; head and neck thrown backward; nose denuded of cuticle; eyelids and ears bitten and bleeding; pupils dilated; no purging from the nose; little frothing at the mouth; Sectio Cadaveris.

Head. Very little bleeding from the scalp; great congestion of the peri-cranium; membranes congested; fluid blood in the sinuses; brain normal.

Thorax. Lungs inflated; two (2) pints of water in each pleural cavity; heart collapsed; ventricles empty; super-facial vessels of the organs dilated.

Abdomen. Stomach distended with water and mucous; patches of the intestinal coat congested. The organs not enumerated healthy.

In the reports of cases examined by the Coroner, no attempt is made beyond giving a correct and faithful record of conditions found, not in special cases only, but in all cases submitted to dissection. The indulgence of the critical is therefore asked, until a sufficient number shall have accumulated to allow practical deductions to be made, from observations noted at the time by the side of the cadaver.

It is to be regretted that the limited facilities which the city affords, does not permit of such detailed investigation as would oftentimes be exceedingly desirable and useful. It is believed, however, that a reliable narration of the most prominent and familiar features only, would contribute in no doubtful way, to unfold the mysteries and expose the causes which so often bring a general class of cases before the Coroner's inquest, and also give precedents of absolute facts rather than elaborate and plausible theories, which, although easily read, are obtained at much less sacrifice of time and labor.

BIBLIOGRAPHICAL NOTICES.

A Practical Treatise on the Diseases of Children. By Alfred Vogel, M. D., Professor of Clinical Medicine in the University of Dorpat, Russia. Translated and edited by H. Raphael, M. D., late House Surgeon to Bellevue Hospital; Attending Physician to the Eastern Dispensary for the Diseases of Children, etc., etc. New York; D. Appleton & Co.—1870—pp. 603. San Francisco; A. Roman & Co.

It is now about eight years since this book made its first appearance, and has already reached its fourth edition, and been translated into the most prominent European languages. From our examination of the work, we are satisfied that it will be equally as much appreciated on this side of the Atlantic.

It is certainly one of the fullest and most complete systematic works that we have on the diseases of children. The author is abreast of the age in his pathology, is an accurate and careful observer of symptoms, and exceedingly clear in his descriptions. He shows a great deal of common sense and tact in his method of dealing with differential diagnosis. His treatment may be said to be simple and intelligent, with very little compounding and complicating of remedies. As we are limited for space, we will content ourselves with giving his treatment of pneumonia, that our readers may form some idea of the author's practice.

"When the skin is burning hot, and no diarrhœa is present, I give one-eighth of a grain of calomel, four or five times daily, until green semi-fluid stools ensue; after that a simple mucilage of gum arabic, with a little syrup simpl. and tr. opii gtt. j—ij until constipation is produced. The infus. ipecac. is avoided as long as possible, but may be prepared and preserved in a cool place till required. In all cases the local treatment consists in the application of a moist girdle, in the following manner: A diaper, or a large white pocket handkerchief, is folded up like a cravat; the bandage thus obtained should be three or four fingers wide, and the whole length of the handkerchief. This is now dipped in tepid

water, and wrung out so that the cloth does not drip, and then applied like a girdle, around the chest of the child. A second cloth double the size of the first, is folded up in the same manner like it, but which must be from six to eight fingers broad, and then applied dry and warm over the first. It is very advisable to interpose a piece of gutta percha between the dry and the wet girdle, by which, on the one hand, the moistness of the first cloth is preserved longer, while, on the other, the second does not become wet. If the water with which the fomentations are made is not too cold, the child will tolerate them very well, and, in a short time a slight retardation in frequency and improvement of the respiration are indicated by less motion of the alæ nasi. These tepid compresses should be continued for from four to six days, and it is not at all necessary, during the entire time, to remove the bandage; the gutta percha is raised up a little, and a few teaspoonfuls of water are poured upon the girdle, or it is moistened with a sponge. The principal thing is not to allow a cooling of the skin by evaporation to take place. To secure this object, the dry cloth should properly overlap the moist one on all sides, and, as it is impossible to prevent the upper cloth from becoming wet, it should be changed several times during the day. I certainly have applied this girdle many hundred times, and have very often seen rapid improvements ensue; nevertheless, it cannot be denied that the half of these children perish notwithstanding."

The volume as it is presented to the profession by the American publishers, is a very prepossessing one, containing six beautiful lithographic plates.

A Treatise on Intraocular Tumors. From original clinical observations and anatomical investigations. By H. Knapp, M. D., late Professor of Ophthalmology, and Surgeon to the Ophthalmic Hospital in Heidelberg. Translated by S. Cole, M. D., of Chicago—pp 323. New York; William Wood & Co. San Francisco, A. Roman & Co.

In his preface the anthor says: "I am convinced that intraocular tumors are destined to throw light upon many general questions of fundamental significance for the theories and therapeutics of tumors in general." Any one acquainted with the use of the ophthalmascope, will at once comprehend that a man so skillful in the use of ophthalmic instruments, and so capable of making correct observations, may add greatly to our knowledge of tumors and their treatment, by "watching the growth of all kinds of pseudo-plasmas in the interior of the eye."

The author hopes that this effort of his will have the effect of stimulating his colleagues to make further and more minute investigations of the subject, so do we. We hope that our ophthalmologists will enlighten us on many points, in regard to tumors. For instance, whether malignant tumors are local in their primary stage, and subsequently become malignant or constitutional. The influence of hereditary predisposition to develop malignant tumors from local irritation or blows; whether the nature of a tumor can be positively diagnosed by the microscope, etc., etc. We have no doubt but that the author will be assisted in this new field of investigation by his colleagues, and feel that their labors must result in much good to the general profession.

The work is of special value to the oculist, and at the same time must possess interest for all who are interested in the progress of our science.

It is printed on excellent paper and in fine, clear type; has one chromo-lithographic and fifteen lithographic plates.

On the Wasting Diseases of Infants and Children. By Eustace Smith, M. D., London, Member of the Royal College of Physicians; Physician Extraordinary to His Majesty, the King of the Belgians; Physician to the Northwest London Free Dispensary for Sick Children, etc., etc.—pp. 195. Philadelphia; Henry C. Lea.—1870. San Francisco; A. Roman & Co.

Another work on diseases of children, some may be disposed to say. Whether we have already too many, or whether we still require more and better ones, we leave for others to decide. But sure are we, that those we already have do not receive the careful reading from the general practitioner that the importance of the subject demands. And while our mortuary reports are so extensively disfigured by the terms "marasmus," "tabes," "atrophy," "inanition," and such like meaningless terms applied to the chronic diseases fatal to children, we will consider it a duty to recommend to the profession, every reliable work on the diseases of children, that comes under notice, whether new or old.

In this volume the author deals with the very class of diseases most likely to be neglected by the practitioner, and not sufficiently treated of in most systematic works, for which reason, we the more heartily recommend a perusal of this volume to our readers.

Says our author, "Many thousand children die yearly in London, alone, for the simple reason that they are fed systematically and persistently upon food which they cannot digest."

The work consists of an introductory section on the method of examination, general therapeutics, etc., and of nine chapters as follows: Simple atrophy from insufficient nourishment, chronic diarrhœa, chronic vomiting, rickets, congenital syphilis, worms, chronic tuberculosis, chronic pulmonary phthisis, tuberculization of glands, and an addendum, discussing derangements of the bowels attendant on second dentition.

A Treatise on the Diseases and Surgery of the Mouth, Jaws and Associate Parts—pp. 693. By JAMES F. GARRETSON, M. D., D. D. S., etc., etc. Philadelphia; J. B. Lippincott & Co., 1869. San Francisco; A. Roman & Co.

The work before us may properly be called a compilation, "embodying (as the author says in his preface,) the results of his observations and experiences during a somewhat extended practice in that branch of the profession to which it specially relates."

As a work for Dentists, we are informed by several competent men of that body, that it is exceedingly valuable, and will, no doubt, meet with an extensive sale in their profession. As for his anatomical descriptions, and the part of the work which is purely surgical, we cannot say so much. It is profusely illustrated, and printed on good material.

Manual of Hypodermic Medication. By ROBERTS BARTHOLOW, A. M., M. D., Professor of Materia Medica and Therapeutics in the Medical College of Ohio, etc., etc. Philadelphia; J. B. Lippincott & Co., 1869, pp. 150. San Francisco, A. Roman & Co.

This little book is a very great convenience to the profession to say the least. Besides giving the experience of the author, (which would seem to be considerable) it also gives the views of the English, French and German writers upon hypodermic medication.

The work is divided into two parts, the first treating of the history, technology and general therapeutics of hypodermic medication; the second part of the use of morphia, atropia, strychnia, conia, woorara, nicotia, hydrocyanic acid, physostigma, caffein, ergotin, quinia, mercury, arsenic, and irritant injections.

This is, by all means, the best and most convenient work that we have yet seen on the subject, and is just what any one requires who wishes to try the method.

CALIFORNIA PHARMACEUTICAL SOCIETY.

Report of the ninth meeting, held February 14th. Meeting opened at 8 P. M. by the President, Mr. Calvert, nineteen members being present. Minutes of previous meeting read and approved. Mr. Simpson, chairman of the Executive Committee, made a report upon various matters of local business concerning the Society; report accepted and ordered to be placed on file. The Secretary, Mr. Steele, presented correspondence which had passed between the Ex. Committee and members of the State Legislature, relative to certain "Drug Bills" recently introduced and referred to the Hospital Committee of the same. Considerable discussion ensued, and the unanimous conclusion of the meeting was, that not only were the bills mentioned, deficient in any measure of protection, but exceedingly onerous in some of their provisions. (It was shown that all "Poison Bills," passed in State Legislatures had remained inoperative upon the Statute books). By these "Bills," druggists were to be prevented from selling certain drugs except under arbitrary restrictions, while grocers and general dealers were not so restrained. With no section requiring registration of Physicians and Apothecaries, these bills would not only restrict and hamper the natural course of trade, but transfer the same from legitimate hands to incompetent and irresponsible dealers.

The Secretary read the names of six applicants for membership who were unanimous elected. The establishment of a course of lectures before the Society was mentioned, and received general approval; meanwhile several members volunteered to read essays upon pharmaceutical subjects, before future meetings.

Meeting adjourned until second Monday in March.

CALIFORNIA ACADEMY OF SCIENCES

The regular monthly meeting of the California Academy of Natural Sciences was held on the 7th ult., in the Academy's rooms, on Clay street.

Messrs. Abner Doble, Thomas Nelson, Professor Williams, and C. D. Gibbs were elected members of the Society. Thos. W. Newcomb and A. A. Hazeltine were proposed for membership.

Donations, consisting of twenty-five specimens of hand-shells, from the Isthmus of Panama, and four bales of plants, were received.

Dr. Behr read a paper on the destruction of plants in the lower part of the city, in which an account of many were given that are now extinct. This latter was attributed to the filling in of the lower part of the city, while many considered they were destroyed by ducks.

Dr. Stout rose to a question of privilege. He had a document in his possession for presentation to the Academy; was in a hurry, and if granted the privilege he would offer it.

Some months ago the Consul-General of Norway and Sweden visited his native country; and while in Christiana the Academy of Sciences there made him the bearer of their medal, and a package containing some works on Natural Sciences. Also a letter from the Christiana Academy, addressed to Dr. Blake, President of the California Academy.

Dr. Blake said the Academy must feel much obliged to the Christiana Academy.

Dr. Blake read an extract which he had prepared from a German work by Profesor Carl Voight, read before a Society of German Naturalists, at Stuttgard, which contained important information. It showed that the age of man far exceeds the limits assigned. Geological observations had led to the discovery of human remains in France, Spain, and countries bordering on the Mediterranean, which in turn led to the belief that man existed when the elephant and rhinoceros lived in Europe; when the Sahara, as well as Finland, Sweden and Norway were two great seas; and that he must have been a witness to those great changes that have taken place. The Polar fox and bear lived in the southern part of Europe, since when the climate gradually became changed. Man must have inhabited the earth for a term of which six

thousand years is an infinitely small period.

The similarity of weapons which must have been used in the south of France and in Spain, as lately discovered there, with those used by the Esquimaux race, show that these people must have led the same sort of life. Our ancestors were wild in the truest sense of the word. They were not only savages, but cannibals, and eat their victims that they might receive the strength of the slain.

The earliest man who inhabited Europe came from Africa, not from Asia, as also plants. Man's anatomical development is more gradual as they become more civilized. In some cases, the length of the limbs and the form of the skull were criterions of our development; and the lower we descend the nearer we approach the higher ape.

The regular semi-monthly meeting of the California Academy of Sciences was held on the 21st ult., in their rooms on Clay street, President Dr. James Blake in the chair.

After the reading of the minutes of the previous meeting, which were approved, Messrs. T. W. Newcomb and A. A. Hazeltine were elected resident members.

Some very fine and costly works, embellished with numerous engravings on the flora of Java and adjacent islands, were presented by Captain B. M. Hartshorne, President of the California Steam Navigation Company.

The reports of the United States Naval Observatory on the total eclipse, and several other interesting works, were donated to the Academy.

Professor J. D. Whitney read a very interesting paper on the phenomenon of the North Drift, which was a continuation of a paper on the same subject, read at a previus meeting. Those present then entered upon a discussion on the subject of Earthquakes, their probable causes, and the effects they have on buildings erected on rocky foundations compared with houses constructed on alluvial soil. This was carried on at some length, but no definite conclusion was arrived at.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

On Tuesday, Nov. 23d, there was read at the Society, under the auspices of Mr. John Marshall of University College, a paper by Dr. William Meyer, of Copenhagen, on "Adenoid Vegetations in the Naso-pharyngeal Cavity; their Pathology, Diagnosis, and Treatment." According to the author there exists a certain form of defective speech, often accompanied by imperfect hearing, which is found to be dependent on the presence of exuberant growths of vegetation in certain parts of the naso-pharyngeal cavity. These, he thinks, are occasioned by glandlike vegetations growing beneath the mucous membrane. Symptoms were, the effect on the speech, and flattening of the nostrils, with, in some cases, deafness. The diagnosis is to be made by touch, by means of the forefinger introduced into the cavity. The treatment recommended was to remove the growth by means of a ring-shaped knife, which caused a good deal of bleeding; or, as auxiliary means, the nasal douche, or nitrate of silver, or galvanic cautery applied to the parts. The paper was written in admirable vernacular; but it was a heavy paper, and Mr. Marshall alone gave cases to illustrate what was meant by the author. Of 700 orphans at Haverstock Hill School two presented the characteristic faces, and there was certainly obstruction to the finger behind the soft palate.—*Med. Press and Circular.*

California Medical Gazette.

SAN FRANCISCO, MARCH, 1870.

☞ *All Letters and Communications to be addressed to the* "EDITORS CALIFORNIA MEDICAL GAZETTE, *care of A. Roman & Co., San Francisco.*"

THE FLORA OF CALIFORNIA.

The catalogue of plants found in the vicinity of San Francisco, now being published with each number of this journal, will be perused with great curiosity by every one who has ever felt any interest in botany. Heretofore the only means of knowing anything of the flora of this Pacific coast, has been by searching the reports of scientific explorations that have been undertaken by various nations, from the time of La Perouse down to the present. Those volumes are expensive, and to most persons, inaccessible.

When this catalogue is completed, there will be furnished a check list which will aid the student very much, though we must wait until the Manual promised by the Geological Survey of the State is published, for the descriptions and a more intimate knowledge of them. Enough is published already, however, to present the means of comparison with the flora of the Atlantic coast of our continent. It is a matter of no small astonishment to learn how few are common to both shores. Of the first family, the Ranunculaceæ, there are enumerated in the flora of the Geological Survey of the State of New York, sixteen genera and thirty-nine species. Our catalogue gives eight genera and twenty-two species; of the genera, seven, and the species, five are common to both regions, and in no other family will we find anything like so large a proportion.

The next family, the Berberidaceæ, or Barberry; of the three genera found here, only one is found in New York, and not one of the species. Of the poppy family not a genus or species is common. Of the great family of the Cruciferæ, there are in our catalogue, fifteen genera and thirty-seven species, of which last, only six are common to both States, and of these, four were introduced into America from Europe. Of violets there are fifteen species enumerated in the New York flora and eight in our catalogue, but not one is found in both. Of the Malvaceæ, of eight species found in California, only one is found in New York.

We look through page after page of strange names, with here and there a genus represented on the eastern shore but the species nearly all new.

Of the Rhamnaceæ or family of the Buckthorn, to which the Ceanothus or California Lilac belongs, we find twelve species not known in eastern flora, but when we turn on to the Leguminosæ, we are lost altogether; seventy-seven species are enumerated in our catalogue, only three of which are found in the other one. Of these is the Trifolium repens or white clover, (introduced); of this genus we have eighteen species unknown on the Atlantic coast. In this family are found the Lupines, whose crowded spikes of flowers, generally blue, give such a characteristic tone to the flora of our coast; we have fourteeen species in our vicinity while the Atlantic coast can show but one.

Of the seventy-four genera of the Compositæ, twenty-one are represented on the other side, but with only twelve species out of one hundred and sixty-eight. In this tribe is the Aster, of which New York enumerates twenty-six; our catalogue boasts of but two, both strangers at the east. The Maruta cotula (May-weed) and the Achillea Millefolium (Yarrow), now spread so profusely over the country, were both introduced to America from Europe, and have found their way to California with the first pioneers. Thus far we have alluded to herbaceous plants; when we turn our catalogue to hunt up those of a larger growth, we shall find the same rule to hold, we hardly find a shrub or a tree common to both shores. Of the Walnut family so numerous and respectable at the east, we have but one solitary representation, the Juglans rupestris; of the seven species of Oak enumerated, not one is found east of the Rocky Mountains. The eight species of Willow and as many Pines, with all the other of the Coniferæ, are peculiar to this coast.

Professor Bolander is conferring a favor upon the profession, and all others interested in botany, by furnishing this catalogue, that cannot be too highly valued. We hope it will be followed soon with the more extended report by the State Geological Survey, so that our schools and academies may have the means to cultivate the most refining and elevating as well as the most popular of all the natural sciences. Thus far, as can be seen by this sketch, they could only teach the general principles of the science; it has not been possible to apply them to the practical purposes of the field, to the classification and intimate knowledge of our indigenous and intensely interesting flora.

Therapeutic Action of Cubebs.—According to M. Heidenreich, the diuretic properties of cubebs reside in the resin, and that cubebin is inert.

WHO WANTS A DIPLOMA?

We took occasion in a previous number to say that the possession of a diploma from a respectable medical college was no evidence of fitness to practice medicine; since then we have been presented with the following letter, addressed to Mr. Searby, an accomplished druggist in this city.

The writer evidently misconceived the character of his man, who holds that it is more honorable to practice a profession in which he is well educated, than to impose upon the public by playing the part of physician through authority surreptitiously obtained.

Proprietor Drug Store, N. E. cor. Folsom and Fifth street, San Francisco Cal.

Medical Agency, Broadway, New York.

Dear Sir:—

Herewith I beg to enclose a copy of an advertisement which may prove of interest to you. It frequently happens that meritorious medical men are engaged in practice, who, for something or other in early life, have been prevented from obtaining the usual collegiate authority; to such, the advantages offered in the present communication specially commend themselves. The diploma offered is a *bona fide* original one, issued from a medical college holding a State charter, whose graduates rank with the highest. The possession of such a document entitles its holder to wield and exercise, both in practice and before the law, every privilege of a physician and surgeon in any community. My confidential relations with the Faculty of the institution, empowers me to obtain from time to time diplomas for a limited number of applicants, provided they furnish such evidences of qualifications as to give assurance that no dereliction of theirs in practice will ever bring discredit on the standing of the college.

Should you need my services, send a statement, signed by yourself, embodying the following items, viz: 1. Age. 2. Name in full. 3. Place of birth. 4. How long have you been in practice. 5. At what place or places. 6. Where now located, together with $125.00 U. S. currency, to cover expenses, viz: college matriculation, lecture and graduation fees and personal commission for myself (enclose the whole in a registered letter to secure safety in transmission). Upon receipt of statement, etc., your name will be entered on the roll of graduates and a diploma forwarded.

By writing at once you can secure immediate action on commencement of incoming term.

Respectfully,

L. TREVELAND, M. D.

Medical diplomas have been furnished to individuals in this State, by *respectable* colleges in the eastern States on no better evidence of qualifications than would be afforded to this agent; but this is the first time that the base offer has been publicly advertised.

The public need some higher evidence of the qualification of medical men than the possession of a diploma, and we look to the National Medical Association to furnish it by conferring a higher degree, corresponding to the title of the Royal

Societies of England, upon all such as deserve it. The enemy have overrun our lines of defence and nothing remains but to fall back upon our centre and throw up new ones.

The title of M. D., has become a by-word and reproach, it has been made so easy of attainment that it is a matter of small importance whether a man has it or not.

DIPLOMAS FOR SALE.

Since the above was sent to press, we have received the *Chicago Medical Journal* for February, in which we find some editorial remarks under the above heading, from which we learn that not only New York, but Philadelphia, Chicago and Milwaukie, all have agencies publicly advertised for the sale of diplomas. How much we have been behind the times. We have no agencies yet in California—have we? No, it will not pay. Diplomas are too cheap here to justify such expenditure of financial talent; and besides, no man or woman who has any self-respect will show one if he or she has it. We assure all hospital nurses and apothecaries' clerks, ambitious to assume the responsibilities of the *ars medendi*, that there is no necessity of incurring so much expense to procure diplomas; they are not needed here, this is a free country, every man has an equal right to take life, and one may do it with impunity, provided it cannot be proved that he did it intentionally and with malice prepense. A conviction for malpractice was never obtained in California for one of the hecatomb of victims to medical incompetency, and never will be, until legislatures shall leave medical matters to medical men. Let them revoke charters to medical colleges that do not make it one of their qualifications for attendance on a course of medical study, that the candidate shall at least, be able to read the advertisements in a medical almanac and know whether the mountebank who assumes to instruct, comprehends the first principles of a science of which his professorship is a burlesque.

OUR HOSPITAL.

Our city authorities have been told again and again, that our City and County Hospital is a disgrace to our metropolis, and that the blame is their's and not that of the medical and surgical staff. The deplorable and crowded condition of the poor creatures to whom misfortune leaves no choice, has at last, we learn, elicited the sympathy of these intelligent and humane city fathers, consequently, more hospital accommodations are to be provided. An addition to the *old monstrosity* is to be built, which we have no hesitation in proclaiming an unpardonable injustice to the indigent sufferer, and an outrage upon the intelligence and age in which we live.

Were the addition a necessity for temporary relief, we would not have a word to say, but it is not. Before the building can be completed, the winter months, which always increase hospital demands, will be over, and before another winter new grounds and new hospital can be erected Thanks to the advance in hygienic science, and to our experience in the construction of hospitals, a palatial edifice of stone and mortar, which requires years and a mint of money to build, is no longer necessary. In fact, some of them when completed, might be more properly called charnel houses than hospitals. Plenty of space has become one of the most essential features in hospitals. Let the money be expended for land, and wooden buildings to contain from 25 to 50 beds, may be built without any great expense. Our climate is particularly advantageous for the modern wooden hospitals. They may be built long, but narrow, having abundance of windows, so that with the wind blowing through them as well as under them and over them, the patient must receive plenty of light and fresh air—medicine as cheap and essential as they are grateful and beneficial.

If thousands of dollars are to be expended on a castle, to be miscalled a hospital, or to build more wings to that "old monstrosity," we can only protest against men who are ignorant of the teachings of modern science, being allowed to squander the money of intelligent citizens.

A WRONG DONE TO THE PROFESSSON.

In our January number, we reprinted from one issue of a daily paper, three "remarkable cures" effected by as many different individuals.

We inserted them without a word of comment. We are not responsible for the facts nor the circumstances; we printed them as we found them. What reason had we to suspect that either of the parties referred to, were "surprised or mortified" at their publication? It was not the first time our attention had been called to a newspaper notice of the "Extraordinary Surgical Operation." The *Morning Call* gave it a capital notice several months since; but we saw no evidence of its giving "surprise and mortification" until after its appearance in the Gazette precisely as it appeared in a daily paper, surrounded with the other extraordinary cures with which most daily papers abound. The inference that either of these gentlemen "procured their publication" was not ours, and we are sorry

that any man could be so ungenerous as to "imply" so unworthy an action.

Our esteemed cotemporary is edited by a professor and a graduate of a California Medical College, and they surely will not apologize for so flagrant a violation of the following passage in the National Code:—"It is derogatory to the dignity of the profession to * * * * or to publish cases and operations in the daily prints, or to *suffer such publications to be made, etc.* These are the ordinary practices of empyrics, and are highly reprehensible in the regular physician."

We regret to give any "extremely sensitive" gentleman pain. We suffered ours some time ago in silence, but we cannot suffer a "great wrong done" to the profession in the house of its friends, without calling attention to it.

CHRONIC INVERSION OF THE UTERUS.—A NEW METHOD OF REDUCTION.

In the "American Journal of Obstetrics and Diseases of Women and Children," Dr. Thomas (New York) in an article on this subject, gives the history of four cases, one of which he reduced by a new method. The case was evidently an obstinate one, as several attempts to reduce it had been made in vain, by the most skillful manipulators. In all, fourteen attempts at reduction by taxis had been tried, "some efforts lasting from five to six hours." Cutting the constriction which resisted the reduction had also been tried, and failed.

Says Dr. Thomas:

"The only recognized operation which now offered itself, was amputation, at the thought of which the patient revolted. Under these circumstances, I proposed an operation which, throughout the progress of the case, I had kept in reserve, and which two years before it, I had fully elaborated in my mind. It was, that I should make an incision two inches in length through the abdominal walls and peritoneum, just over the cervical ring; pass into this ring a steel dilator, made on the principle of a glove stretcher; stretch the constriction, and return the uterus to its place"

The operation occupied one hour and two minutes, was a complete success, and the woman made a good recovery, being able to leave her bed for the lounge on the eighth day after the operation.

Dr. Nott, in an article on the treatment of endometritis by uterine injections, says that it is the only local treatment in which he has any faith, that it is not attended with danger, if properly managed, and that the objections urged against the treatment arises "1st. In want of a proper instrument for injecting the body of the uterus. 2d. From articles too irritating to suit the condition of the organ."

To obviate the dangers and difficulties of uterine injections, he has had constructed a uterine catheter, which is about nine inches in length, and "consists of a large silver catheter, with an eye an inch long and as wide as the size of the instrument will permit, on each side. A small tube, not more than one-fifth the calibre of the catheter, runs along the concave wall of the latter, and terminates about the middle of the eye. When water is forced by a syringe into the tube, it escapes through the other end of the small tube into the cavity of the womb, and falling at once into the eyes, rushes out through the large catheter. It is impossible that any distending force can be exerted on the uterus, however rapidly or forcibly the fluid may be thrown in."

The instrument is made by Tieman & Co., and we think must commend itself to every practitioner interested in the treatment of uterine diseases.—[See *American Journal of Obstetrics and Diseases of Women and Children.*]

Dr. Patton, in a capital article entitled "*A few Hints on the Treatment of Urethictis,*" makes the following pert suggestion:

Let the preliminary measure, the *avant courier* of success, so to speak, invariably be an "*earnest*" from the individual, to ratify the assurance made us that our precepts will be kept inviolably. Our legal brethren, with more of an eye to business than we have, especially with offenders, understand such matters better, and with them a "*retainer*" is the word.

This *pre-requisite* or adjuvant of the treatment is not a mere business precaution, nor vindictive indemnity for past offences, on the principle that "those who dance must pay the fiddler"—illustrated by some of our druggists in charging these unfortunates two prices for our prescriptions—but a substantial appeal to the self-interest of the individual in securing obedience to measures for his own advantage and the safety of our reputation. It is taking advantage of human nature for the welfare of both parties. The surgeon thereby retains his case till cured, and secures besides, future patronage and recommendation.

If, on the other hand, through fear of losing patronage, or from sentiments of false delicacy, he neglects the enforcement of this forerunner of success, he will, in the large majority of cases, in punishment for his pusillanimity, be thwarted in his best and most assidious efforts, be charged with unskillfulness, deserted before having the opportunity to bring his curative efforts to a successful issue, and will, most assuredly, experience humiliation, disapointment and professional and pecuniary loss.—*See Cin. Lancet and Observer.*

INSANE ASYLUM REPORT.

We have received the Seventeenth Annual Report of the Superintendent of the Insane Asylum of California.

All persons feeling any interest in that unfor-

tunate class of our fellow beings for whose benefit this State charity was founded, can but be gratified by this report. Never since its foundation has it been managed with so great skill and philanthropy. It has ceased to be our opprobrium, as it was through so many weary years while its control was left to political intrigue. Of all institutions, hospitals and asylums for the unfortunate should be placed beyond such influence. Reward for political services would be better made directly from the State Treasury, than through the charitable institutions whose management requires the ablest professional skill, and "To administer to a mind diseased," is acknowledged to call for the very highest culture, with the most consummate talent.

CRAIG MICROSCOPE.

This might be very properly designated as a scientific and useful toy. In fact, we do not know of any way that a family can purchase the same amount of instructive amusement for $2.50, as can be obtained from a Craig Microscope. It affords instruction and amusement alike to both adults and children. One can examine with it, the eyes, wings or legs of insects; or seeds in flowers; or provisions; it will reveal the Trichina in pork, etc., etc. It has met with ready sale wherever it has been introduced, as almost every family buy one.

The editors of the "*Minneapolis Daily Tribune*" (January 23d) seem very much exercised in reference to an article which they say appeared in the California Medical Gazette, written by Dr. Gilchrist, on the climate of Minnesota for pulmonary diseases. It would seem that Dr. Gilchrist has made anything but a flattering report of the influence of the climate of Minnesota on consumptives, and as the article is alleged to have been copied into Eastern medical journals, it is supposed by the "*Tribune*" men that many patients will be deprived of the health-restoring air of Minnesota, whether to the greater detriment of the State or the patient we cannot say; and as we know nothing of Dr. Gilchrist or his article, we feel no responsibility in the matter.

We have to thank Messrs. Appleton & Co., for a copy of a well executed steel engraving of the late Dr. John W. Francis, which the publishers have dedicated to the profession of the United States.

We have to acknowledge the receipt (with the Medical and Surgical Reporter of January) a copy of an engraving of Professor Gross, for which we ask the publishers to accept our warmest thanks, and feel sure that they could not have sent their subscribers a more acceptable new year's present. Prof. Gross is a name the profession honor themselves in honoring.

ACCIDENT.

Dr. Jonathan Letterman, Coroner of the city and county of San Francisco, met with a fracture of the femur above the knee, on the evening of the 21st of February, by being thrown upon the pavement while stepping from a carriage. The responsible duties of his office will devolve upon Justice Pennie until his recovery.

This city should be provided with another coroner. The duties are altogether too onerous to be performed with full justice to the public by one man. The city should be divided into two districts, and then each coroner would have as much to do as one man should.

RELAPSING FEVER.

Dr. Buckley has prepared at our request a paper on the Relapsing Fever, which is now making its appearance along the Atlantic sea board, and causing no little excitement among medical men.

Few, if any, men in California have had the opportunity to observe the symptoms of this disease, which Dr. Buckley has.

Quinopicric Acid has been proposed to the French Academy of Medicine as a name for the combination of cinchona alkaloids (which have not yet been utilized) with pieric acid. Quinopicric is to possess medicinal properties similar to quinine, and be much cheaper.

SURGERY.

A CASE OF COMPOUND FRACTURE OF THE PATELLA; WITH AN ANALYSIS OF FIFTY-SIX CASES OF THAT INJURY.

By A. Poland, Esq.,

In presenting the case to the notice of the Society, the author drew attention to the following facts. 1. The peculiar and unusual nature of the accident; 2. The attempt to save the limb under circumstances most disadvantageous, owing to physical and moral defects; 3. The unfortunate relapse and threatening symptoms of pyæmia, after the primary danger of an inflamed and suppurating joint had passed over; 4. The chest-complication and exhaustion of the patient after subsidence of the pyæmic symptoms; 5. the saving of life by amputation of the limb.—G. M., aged 28, a boiler-maker, was admitted into Guy's Hospital, on January 19th, 1869. About eight weeks previously, a transverse lacerated wound over the right knee was produced by a fall; for this he was treated as an out-patient at the hospital. The wound was about three and a half inches in ex-

tent, and the patella was exposed; but the joint was not injured. Strapping, and a back splint between the knees were applied. Cicatrisation was almost completed; and he removed the splint and went about his employment. Early on the morning of his admission, he caught his foot in a grating, and was thrown down on his side, in his fall using great muscular exertion to save himself. The newly cicatrised wound was torn open, and he suffered great pain. He was immediately brought to the hospital. There was a large gaping wound in the side of the original injury; also a transverse fracture of the patella. There was hemorrhage and escape of synovial fluid from the joint. The dresser on duty introduced his finger into the joint. The wound was closed by sutures, a compress of lint with strapping applied, and a back splint adjusted behind the knee. When he came under Mr. Poland's notice he was suffering from a chronic cough and general debility, which gave rise to the suspicion of phthisis, although no evidence could be elicited by the stethoscope. In three or four days, inflammation and swelling of the joint ensued. The dressings and sutures were removed and carbolic acid lotion was applied to the wound, which had a sanious discharge. On the tenth day suppuration had fully set in, and the discharge was profuse. This suddenly lessened, and symptoms of pyæmia became manifest; but suppurative action in and about the joint, necessitating the use of free incisions. During a lingering and tedious suppuration, with ulcerative action for a period of six weeks, the man's health began to give way. Amputation was performed on the 5th of March. The patient made a most rapid recovery, although he did not lose his cough entirely. The author made some comments on the peculiar nature of the injury, and referred to other cases of compound fracture of the patella. The patient's extremely exhausted condition and general state of health negatived the performance of excision; and, the more so, as the integuments and soft parts above and below the joint were much implicated in the suppurative action. The author also adverted to the statistics of fifty-six cases of compound fracture of the patella without any complication of the neighboring bones of the joint. Mr. Poland concluded by inquiring whether there could be a compound fracture of the patella without a wound or lesion of the knee joint? He had made some experiments which led him to believe that there could.

Mr. Solly spoke of the treatment of fractured patella. He still adhered to the old plan of elevating the leg, so as to relax the rectus femoris muscle, and placing a splint behind.—Mr. Holmes doubted whether a compound fracture into the knee-joint was now held to be an absolute indication for amputation; such cases were, however, dangerous, and would very probably demand it. The paper would, no doubt, call attention to the feasibility of preserving the limb. He wished that more had been said about excision of the patella in compound fracture—an operation which, he believed, had been performed by Dr. Humphrey of Cambridge. He was very sceptical as to the possibility of a compound fracture of the patella occuring without the joint being opened. Resection ought to be avoided in compound fracture of the patella; the injury was almost always after childhood, one which required amputation.—Mr. Brooke said that the deficient supply of blood to the lower part of the patella must cause repair to be very slow. It often happened that, when a patient was sent out six or eight weeks after fracture of the patella, the ligamentous matter forming the union became stretched. This was to be obviated by causing a splint to be worn behind the joint for some time.—Mr. Birkett had seen only one case of compound fracture of the patella, in Guy's Hospital, under the care of the late Mr. Aston Key. A man fell from a wharf into a barge containing iron, striking the centre of the patella on a piece of iron. This was his only injury and the case did well. That the joint was opened was proved by some gentlemen who introduced their fingers into it through the wound. There was scarcely any constitutional irritation. The treatment consisted of the application of many leeches, with rest and extension. The man afterwards worked long at the same wharf, having perfect power of motion in the limb. In a case under his own (Mr. Birkett's) care, a man had received a wound a little below the patella; the capsule became distended with blood, some of which could be squeezed out. This patient also did well. He therefore hesitated to decide on amputation, especially when the unfortunate results of secondary amputation were remembered. He thought elevation of the limb not essential in cases of ordinary fracture of the patella.—Mr. Moore said that a splint behind the limb was even more necessary when the patient was allowed to walk about than when he was confined to bed. The idea of producing relaxation of the rectus by elevating the limb was erroneous. His knowledge of compound fracture of the patella was very limited. He had seen a case in which a man fractured both patellæ and recovered. A second fracture of both bones was followed by recovery. After a third fracture of one of the bones, suppuration and death followed.—Mr. W. Adams said that the interest of fracture of the patella lay in the amount of injury done to the joint. Incised wounds of the knee-joint had done well; but with lacerated and contused wounds there must be danger. The choice between excision and amputation must depend on the amount of injury of the soft parts. If there were not much injury, excision might be done.—Mr. Cooper Foster said that Mr. Poland was prevented from being present, having been called to a patient. He did not think that compound fracture of the patella could occur without laying open the knee-joint.—*British Med. Journal.*

MISCELLANEOUS.

AQUAPUNCTURE.

Such is the name of a new and ingenious means of revulsion. The idea is the invention of M. Mathieu. To a small force pump a leaden tube is adjusted whose extremity is filiform. A slight pressure on the lever of the pump suffices for the introduction of the capillary point, and a few grammes of water are injected under the skin. A small pale elevation of the integument ensues, with an occasional drop of blood in the center. The first pain caused by the penetration of the water is severe enough, but this subsides quickly, and in fifteen or twenty minutes the effusion disappears.

M. Dr. Maliez has applied aquapuncture some twenty times in his clinic, from which the following are extracted:

B. 66 years. Muscular pains in the sacro-lumbar mass, accompanying, as is so often the case, a vesical atony of chronic duration, and prostatic hypertrophy. Twenty-eight points of aquapuncture in the region of pain, were followed by instantaneous relief, which still remains after forty days.

V. employed at the mint. Rachitic pains with prostatorrhea. Eight points of aquapuncture procured instantaneous relief. Patient seen twice in eight days. No return of pain.

Madame B. Metritis with slight cystitis, pains en ceinture about the level of the third false ribs. Fifteen aquapunctures with complete cessation of the peri-abdominal pains. Patient not seen again.

F., rue Sa. Louis-en-l'ile. Under treatment for a long time for contraction of the external sphincter of the urethra and persistent pains in the whole perineal region which have been combatted with divers means, irritant frictions, cold sitz baths, narcotics, rectal suppositories and punctures in the perineum. Though a great coward he returned voluntarily, expressing himself as almost cured by the first applications, and not perceiving them further six days after the second.

All these cases, which it is useless to multiply, are such as bear a resemblance to the muscular pains known as *sympathetic*, and aquapuncture induced a cure or relief more effectually and more rapidly than any other mode of revulsion as that of Hoffman or Faradization, though perhaps more painful in application than either.—(*Gaz. des Hop.*, 1869, *No.* 127.)—*Cincinnati Lancet and Observer.*

VENOMOUS SPIDER OF NEW ZEALAND.

At a meeting of the Medical Section of the Auckland Institute, Dr, Wright read a paper on the Katipo, or venomous spider, of New Zealand. The spider is described as small, with an almost spherical body, and distinguished by a vermilion spot. In a case of poisoning by its bite, which had come under Dr. Wright's care, the symptoms were faintness and remarkably slow pulse (fifteen beats a minute.) The shoulder which had been bitten showed a large swelling, surrounded by an erythematous blush. Stimulants were freely given, and the man recovered. The meeting enthusiastically determined "that the katipo should be dissected, and the nature of the poisonous section tested, with a view to discover an antidote."—*Brit. Med. Journal.*

BILIARY CALCULI IN A GIRL: CHLOROFORM TREATMENT.

SIR:—Referring to a case reported in this week's *Journal* of the treatment of biliary calculi by internal administration of chloroform, I may perhaps be allowed to add a short report of a very unusual case of gall-stones, in a young girl of 17 years of age. She passed in all twenty-four stones in a period of eighteen months, each of which was found after each attack about the size of a pea, or a little larger.

The first five attacks were treated in the usual way, by hot baths, opium, and the injection of morphia, with very little success, two or three with the internal administration of chloroform, with evidently more success, and the subsequent attacks, by the inhalation of chloroform, sometimes a few minutes sufficed for the passage of the stone, but in one in which three stones were passed, and afterwards found, it was necessary to keep up the inhalation for ten hours, the intense pain recurring at each break in the administration. Two years have elapsed without any return of the disease; the treatment having been, the prolonged use of soda and sulphuric ether in large doses, and subsequently a very free use of pickles with each meal, a very copious action of the skin being thus kept up. I am, etc.,

—*Brit. Med. Journal.* JOHN SUTTON SIMS.

VARICOSE DILATATION OF LYMPHATICS.

M. Trelat, has recorded a remarkable case of varicose dorsal lymphatics of the penis, which arose as follows:—A healthy man, aged twenty-six, accidentally struck severely the dorsum of the penis against the corner of a table. The contusion was followed by dense œdema of the organ and of the scrotum. Several little tumors formed, with some relief to the pain, and on opening them a jet of fluid appeared, which, both to the naked eye and on microscopic examination, proved to be lymph, showing that a remarkable dilatation of the lymphatic vessels had taken place, tantamount, in fact, to a varicose condition.

Such a condition has been previously noticed by Ricord, Demarquay, and others, and specially commented on in the thesis of M. Binet.—*Ib.*

A DISPLACED SPLEEN CAUSING SYMPTOMS OF STRANGULATED INGUINAL HERNIA.

A remarkable case was submitted to the Societé D'Anvers by M. Kurns of a woman, aged forty, who was admitted to hospital apparently suffering from strangulated left ingunial hernia, characterized by pain, fæcal vomitings, feeble and rapid pulse, &c., and the occurrence of a tumor about the size of the fist in the right iliac region. Vigorous treatment was resorted to, calomel, injections, &c., and even potential cautery, but without success. On *post-mortem* examination, adhesions were found to have formed between the omentum and the intestines, and flakes of pus in several positions. The tumor was found to be the spleen held by pseudo-membranous bands to the abdominal wall, and also to the intestines, which were very much dilated beneath it. The splenic vessels formed a large cord leading to the left hypochondriac region, but the substance of the organ was normal.

This occurrence may aid practitioners in doubtful or difficult hernial cases, and lead to the more frequent use of gastrotomy.—*Ib.*

EYE SALVE.

The Springfield (Ill.) *Journal* records a trial in the County Court which is interesting to all persons who have ophthalmia. Torrey, the plaintiff, had inflamed eyes. He saw advertised the celebrated "Dr. Walker's Chemical Eye Salve," and he purchased a box of that renowned medicament. He applied it to one eye before going to bed, and of that eye he awoke in the morning stone blind—to the damage, as he said in his declaration, of $10,000. Upon this, to make matters sure, he salved the eyes of a dog with the same sovereign remedy, and the dog became as blind as Homer in a few hours. The defendant, the druggist who sold it, proved, however, that two hundred persons, had used the salve, and that none of them had totally lost their sight. Verdict for the defendant. Moral: Be careful how you use quack preparations for the eye, and, whatever happens, never sue a druggist.—*Medical and Surgical Reporter.*

FRENCH INFANT PROTECTION SOCIETY.

This Society, of Lyons, wishing to encourage mothers to nurse their children, will give at its meeting in 1870, a prize of $60 to the author of the best paper on the following subject: "Concerning the influence of nursing on the mind and body of the mother; of accidents and sickness which follow the neglect of this duty.'—*Medical and Surgical Reporter.*

DR. R. R. GOOD, formerly of Kentucky, has received the surgical prize medal of the faculty of Paris for a thesis on "Diseases of the Coxo-Femoral Articulation."—*Med. Gazette, N. Y.*

[*Continued from March No.*]

Latin Names.	English Names.	Natural Habitat.
Cyclobothra, Don.		
C. alba, Benth.,		Woods.
C. pulchella, Benth.,		Gravelly Soil.
C. elegans,		Meadows.
C. cœrulea, Kellogg,		Hillsides.
Calochortus, Pursh.		
C. luteus, Dougl.,		Meadows.
C. uniflorus, Hook & Arn.,		Shady Hillsides.
C. venustus, Benth.,		Meadows.
Camassia, Lindl.		
C. esculenta, Lindl.		Marshes.
Chlorogalum, Lindl.	Soap Root.	
Ch. pomeridianum, Kunth.,		Dry Hillsides.
Ch. sp. ?		Marshes.
Hespericordium, Lindl.		
H. maritimum, Torr.,		Hills and Coast.
H. lacteum, Lindl.,		Swampy Places.
Brodiæa, Smith,		
B. congesta, Kth.,		Meadows.
B. coccinea, Gray,		Redwoods.
B. grandiflora, Smith,		Fields.
B. grandiflora, var minor		Sandy Fields.
Seubertia, Wats.		
S. laxa, Kth.,		Clay Soil.
Calliprora, Lindl.		
C. lutea, Lindl.		Hillsides & Meadows.
Bloomeria, Kellogg.		
B. aurea, Kellogg.		Hillsides.
Allium, L.,	Onion, Garlic.	
A. acuminatum, Hook.,		Meadows.
A. falcifolium, Hook.,		Dry Loose Soil.
A. amplectens, Torr. & Gray.,		Rocky Places.
A. maritimum, Torr.,		Sea Coast.
A. occidentale, Gray.		Rocky Places.
Narthecium, Moehring,	Bog—Asphodel.	
N. ossifragrum, var occidentale.,		Swamps.

Juncaceæ. (*Rush Family.*)

Luzula, DC.	Wood Rush.	
L. campestris, DC.		Hillsides.
Juncus, L.,	Bog Rush.	
J. compressus, HB. & K.,		Sandy River Bottoms.
J. Breweri, Engelm.,		Wet Sandy Soil.
J. Balticus, Deth.,		Marshes.
J. Lescurii, Bol.,		Brackish Marshes.
J. procerus, E. Mey.,		Salt Marshes.
J. patens, E. Mey.,		Wet Places.
J. bufonius, L.,		Everywhere.
J. tenuis, Willd.,		Swampy Places.
J. falcatus, E. Mey.,		Wet Meadows.
J. supiniformis, Englm.		Swamps.

Latin Names.	English Names.	Natural Habitat.
J. Bolanderi, Englm.,		Wet Places.
J. xiphioides, E. Mey.		Water Course.
J. oxymeris, Englm.,		Wet Places.
J. phaeocephalus, Englm.,		Wet Places.
J. triformis, var. uniflorus, Englm.,		Meadows.
J. Kelloggii, Englm.,		Sandy Places.

Commelynaceæ. (*Spiderwort Family.*)

Tradescantia, L.		
T. sp.		Oakland Hills.

Cyperaceæ. (*Sedge Family.*)

Cyperus, L.,	Galingale.	
C. erythrorhizos, Muhl.,		Borders of Lakes.
C. inflexus, Muhl.,		Borders of Lakes.
C. phymatodes, Muhl.,		Sandy River Banks.
Eleocharis, R. Br.,	Spike-Rush.	
E. palustris, R. Br.,		Swamps.
E. sp.?		Swamps.
E. acicularis, R. Br.,		Swamps.
Scirpus, L.,	Bulrush.	
S. pygmæus, Gray.,		Salt Marshes.
S. carinatus, Gray.,		Moist Meadows.
S. maritimus, L.,	Sea Club-Rush.	Salt Marshes.
S. sylvaticus, L.,		Swamps.
S. lacustris, L.,	Tule.	Water Courses.
S. criniger, Gray.,		Swamps.
S. triqueter. L.		Water Courses.
Carex.,	Sedge.	
C. siccata, Dewey,	(Mark West's Creek.)	Low Places.
C. Xalapensis, Kunth.,	(Mark West's Creek.)	Swamps.
C. Hookeriana, Dewey,	(Oakland.)	Grassy Hillsides.
C. paniculata, L.,	(Oakland.)	Meadows.
C. leporina, L. ?		Meadows.
C. Deweyana, Schwartz,	(NapaValley.)	Hillsides.
C. propinqna, Nees.,	(Mark West's Creek.)	Swamps.
C. festiva, Dewey,	(Punta de los Reyes.)	Hillsides.
C. straminea, Willd.		Meadows.
C. lagapodioides, Schkr,	(Mark West's Creek.)	Wet Places.
C. Hoodii, Boott,	(Mark West's Creek.)	Wet Places.
C. sterilis, Willd. var.,		Swamps.
C. stellulata, Good,	(Santa Rosa Creek.)	Swamps.
C. Bolanderi, Olney,	(Redwoods.)	Water Courses.
C. vulgaris, Fries var.*	(Oakland.)	Water Courses.
C. salina Wahlbg var minor,	(Coast.)	Swamps.
C. aquatilis, Wahlbr,	(Twelve Mile House.)	Swamps.
C. Sitchensis, Presc.,	(Tomales Bay.)	Marshes.
C. laciniata, Boott,	(Mark West's Creek, Oakland.)	Swamps.
C. cryptocarpa, Mey.,	(Twelve Mile House.)	Swamps.
C. amplifolia, Boott,	(Coast.)	Cañons.
C. laxiflora, Lam. var. plantaginea, Boott,	(Coast.)	Dry Shady Hillsides.

Latin Names.	English Names.	Natural Habitat.
C. Knieskernii, Dewey,		Wet Places.
C. globosa, Boott.	(Redwoods.)	Hillsides.
C. Geyeri, Boott,	(Redwoods.)	Hillsides.
C. trichocarpa, Muhl. var.,		Meadows.
C. Cherokeensis, Schwntz,	(Santa Rosa Creek.)	Swamps.
C. vesicaria, L.	(Mark West's Creek.)	Wet Places.
C. utriculata, Boott,	(Twelve Mile House.)	Swamps.
C. hystricina, Willd	(Redwoods.)	Swamps.
C. polymorpha, Muhlbg., (New species.)		Meadows.
C. bifida, Boott,		(Salinas Valley.)
C. gynodynama, Olney,	(Coast.)	Meadows.
C. cinnamomea, Olney,	(Coast.)	Meadows.
C. Luzulina, Olney,	(Coast.)	Meadows.

Gramineæ. *Grasses.*

Leersia, Solander,	White Grass.	
L. oryzoides, Swartz,	Rice Cut Grass.	Creeks.
Phalaris, L.	Canary Grass.	
Ph. Canariensis, L.	Canary Grass. (proper.)	Fields.
Ph. Californica, Hook,	Native Canary Grass.	Moist Places.
Ph. angusta, Nees.,		Moist Meadows.
Anthoxanthum, L.	Sweet Vernal Grass.	
A. odoratum, L.		Meadows.
Hierochloa, Gmelin,	Holy Grass.	
H. macrophylla, Thurb.		Redwoods.
Holcus, L.,	Meadow Soft Grass.	
H. lanatus, L.	Velvet Grass.	Meadows.
Beckmannia, Host.		
B. crucæformis, Host.		Moist Meadows.
Paspalum, L.		
P. distichum. L.	Joint Grass.	Moist Meadows.
Panicum, L.	Panic Grass.	
P. capillare, L.	Old Witch Grass.	Meadows.
P. dichotomum, L.		Banks.
P. dichotomum, L. var. thermale Bol.		Geysers.
P. Crus-Galli, L.,	Barnyard Grass.	Along Streams.
Stipa, L.	Feather Grass.	
St. setigera, Presl., ?		Hills and Meadows.
St. Phillipii, Steud. ??.		Hillsides and Thickets.
St. viridula, Trin.		Banks Eel River.
Alopecurus, L.,	Fox Tail Grass.	
A. pratensis,	Meadow Fox Tail.	Meadows.
A. geniculatus, L.,	Foating Fox Tail.	Moist Places.
Phleum, L.,	Cat's-tail Grass.	
Ph. pratense, L.,	Timothy.	Meadows.
Ph. alpinum, L.		Fort Point.
Vilfa, Adans,	Rush Grass.	
V. airoides, Torr.,		Sandy Banks.
Agrostis, L.,	Bent Grass.	
A. asperifolia, Trin.,		Moist Places.
A. scabra, Willd., (laxiflora)	Hair Grass.	Coast.

Latin Names.	English Names.	Natural Habitat.
A. pallens, Trin.		Loose Soil.
A. exarata, Trin.,		Everywhere.
A. canina, L.	Brown Bent Grass.	Coast.
A. pallida, DC, ??		Moist Meadows.
A. vulgaris, With.,	Red Top.	Meadows.
A. verticillata, Vill.,		Springy Places.
Polypogon, Desf.,	Beard Grass.	
P. Monspeliensis, Desf.,		Springy Places.
P. fugax, Nees.,		Wet Places.
Vasaya, Thurb.		
V. comata, Thurb. (Discovered by Dr. Kellogg, near Long Valley.)		Rocky Places.
Cinna, L.	Reed Grass.	
C. macroura, Kunth.		Dry Creeks.

* This grass is used by the Indians for making baskets.

Gastridium, Beauv.		
G. australe, Beauv.		Hills and Hillsides.

* This specie covers all our hills late in the season. Introduced ?

Calamagrostis, Adans,	Reed Bent Grass.	
C. sylvatica, DC,		Redwoods.
C. Aleutica, Bong.,		Hillsides.
C. stricta, Tim.,		Coast.
C. varia, Schrad. ?		Moist Places Coast.
Phragmatis, Trin.,	Reed.	
P. communis, Trin.,		Borders of Lakes.
Cynodon, Rich.,	Bermuda or Scoutch Grass.	
C. Dactylon, Pers.,		Wet Places.
Spartina, Schr.,	Cord or Marsh Grass.	
S. stricta, Roth,	Salt Marsh Grass	Salt Marshes.
Aira, L.,	Hair-Grass.	
A. cæspitosa, L.,	Common Hair Grass.	Wet Places.
A. calycina, Presl. (danthonioides.)		Moist Shadows.
A. elongata, Hook.		Moist Places.
Trisetum, Pers.,		
T. cernuum, Trin.,		Thickets.
T. elatum, Nutt.,		Hillsides & Meadows.
T. barbatum, Steud.		Hillsides & Thickets.
Avena, L.,	Oat.	
A. fatua, L.,	Wild-Oats.	Fields.
Arrhenatherum, Beauv.	Oat Grass.	
A. avenaceum, Beauv.		Meadows.
Danthonia, DC.,	Oat Grass.	
D. Californica, Bol.,		Meadows.
Poa, L.,	Meadow Grass, Speed Grass.	
P. annua, L.,	Low Speed Grass	Low Places.
P. trivialis, L.,	Roughish Meadow Grass.	Hillsides & Meadows.
P. pratensis, L.,	Common Meadow Grass.	Meadows.
P. brachyphylla, Schult.,		Moist Thickets.
P. Douglasii, Nees. (Californica, Steud.,		Sandy Hills.

Latin Names.	English Names.	Natural Habitat.
Atropis, Rupr.,		
A. Californica, Munro.		Meadows.
Brizopyrum, Link.	Spike Grass.	
B. spicatum, Hook & A.,		Salt Marshes.
Briza, L.,	Quacking Grass.	
B. media.		Fields. Mission.
Glyceria, R. Br.,	Manna Grass.	
G. pauciflora, Presl.,.		Streams.
G. nervata, Torr.,.	Fowl Meadow Grass.	Water Courses.
G. maritima. Wahl.	Sea Spear Grass.	Salt Marshes.,
Lophochlæna, Nees.		
L. Calfornica, Nees.		Wet Meadows.
Melica. L.,.	Melic-Grass.	
M. imperfecta, Trin.,		Thickets.
M. poæoides, Nutt.,		Dry Hillsides.
M. Geyeri, Munro.,		Open Woods.
M. acuminata, Bol.,		Redwoods.
M. Harfordii, Bol.,		Redwoods.
Kœleria, Pers.		
K. cristata, Pers.		Dry Meadows & Hills.
Dactylis, L.	Orchard Grass.	
D. glomerata, L.		Gardens & Meadows.
Festuca, L.,	Fescue Grass.	
F. Myurus, L.,		Fields.
F. tenella, Willd.,		Meadows.
F. microstachys, Nutt.,		Hillsides.
F. occidentalis, Hook.,		Thickets.
F. scabrella, Torr.,	Bunch Grass.	Moist Places.
Bromus, L.,	Brome Grass.	
B. racemosus, L.,	Upright Chess.	Waste Places.
B. sterilis, L.,		Waste Places.
B. ciliatus, L.,		Hillsides.
B. virens, Nutt.		Moist Places & Meadows
Lolium, L.,	Darnel.	
L. perenne, L ,	Rye or Ray-Grass.	Meadows.
L. tremulentum, L.	Bearded Darnel.	Grain Fields.
Triticum L.	Wheat.	
T. repens.	Quick-Grass.	Fields.
Elymus, L.,	Lime Grass.	
E. Sibiricus, L.		Fields & Hillsides.
E. condensatus, Presl.,		Banks.
Gymnostichum, Schreb.		
G. Californicum. Bol.,		Open Woody Hillsides.
Sitanion, Raf.,		
S. elymoides, L.,		Dry Hillsides.
Hordeum, L.,	Barley.	
H. pratense, L.,	Squirrel-Tail Grass.	Meadows.
H. murinum, L.		Waste Places.
Lepturus, R. Br.,		
L. Bolanderi, Thurb.,		Dry Hillsides.
L. paniculatus, Nutt.	(By Dr. Canfield, Montery.)	Salinas Plains.

Latin Names.	English Names.	Natural Habitat.

CRYPTOGAMOUS OR FLOWERLESS PLANTS.

Equisetaceæ. (*Horse Tail Family.*)

Equisetum, L.,	Scouring Rush.	
E. hyemale, L.,	Schave Grass.	Banks.
E. eburneum, Schr.		Moist Thickets.
E. fluviatile, L.		Shady Places.

Filices. *Ferns.*

Polypodium, L.		
P. Californicum, Kaulf.		Banks.
P. Scouleri, Hook.,		Rocks.
Adiantum, L.,	Maidenhair.	
A. pedatum, L.,		Shady Banks.
A. Chilense, Kaulf.		Shady Banks.
Petris, L.,	Brake.	
P. aquilina, L.,	Common Brake.	Everywhere.
Pellæa, Link.,	Cliff-Brake.	
P. andromedæfolia, Hook.,		Rocky Hillsides.
P. mucronata, Eat.,		Rocky Hillsides.
P. densa, Hook.		Shady Rocks.
Gymnogramme, Desv.,		
G. triangularis, Kaulf.		Shady Hillsides.
Woodwardia, Sm.,		
W. radicans, Willd.,		Around Springs.
Cystopteris Bernh.		
C. fragilis, Bernh.		Canons.
Aspidium, Sw.,		
A. munitum, Kaulf.,		Shady Hillsides.
A. Californicum, Eat.,		Canons.
Nephrodium, Rich.,		
N. rigidum, Desv.		Wet Places.
N. Felix-mas, Rich.,		Canons.

Hydropterides.

Azolla, Lam.,	
A. Caroliniana.	Floating on Pools.

Musci. *Mosses.*

Sphagnum Dill.,	
S. subsecundum, Nees & Hrnsch,	Swamps-Coast.
S. subsecundum var. longifolium.	
S. auriculatum, Schp.,	Swamps-Coast.
S. cymbifolium, Ehrh.,.	Swamps-Coast.
Ephemerum, Hpe.,	Meadows.
E. serratum, Hpe.,	
Sphærangium, Schp.,	
S. muticum, Schp.,	Meadows.
Phascum, Schreb.,	
Ph. cuspidatum, Schreb.,	Meadows.

Latin Names.	English Names.	Natural Habitat.
Ph. bryoides, Dicks.		Grassy Hillsides.
Pleuridium, Brid.,		
P. subulatum, Bruch & Schp.,		Borders of Ditches.
Gymnostomum, Brch & Schp.,		
G. calcarium, Nees & Hrnsch.,		Wet Rocks.
Weisia, Hedw.,		
W. viridula, Brid.,		Shady Hillsides.
W. cirrhata, Hedw.,		On Redwoods.
Dicranum,		
D. varium, Hedw.,		Borders of Creeks.
D. heteromallum, Hedw.,		Ditches.
D. fuscescens, Turn.,		Redwood Stumps.
D. scoparium, L.,		Redwood Stumps.
Fissidens, Hedw.,		
F. limbatus, Sull.,		Shady Hillsides.
F. grandifrons, Brid.,		Wet Rocks.
Anacalypta, Roch.		
A. Starkeana, Ness & Hrnsch.		Clay Soil.
Ceratodon, Brid.,		
C. purpureus, Brid.,		Hillsides.
Leptotrichum, Hpe.,		
L. Schimperi, Lesq.,		Dry Borders.
Trichostomum, Hedw.,		
T. rigidulum, Smith.,		Ground.
T. tophaceum, Brid.,		Wet Rocks.
F. anomalum, Schp.,		Ground.
F. flexipes, Bruch & Schp.		Ground.
Desmatodon, Brid.,		
D. Californicus, Lesqx.,		Shady Borders.
D. Guepini, Bruch & Schp.,		Shady Borders.
Barbula, Hedw.,		
B. fallax, Hedro.,		Rocks.
B. subfallax, Mull.,		Rocks.
B. artocarpa, Lesqx.,		Borders of Creeks.
B. vinealis, Brid.,		Sandy Soil.
B. flexifolia, Hpe.,		Rocks.
B. Virescens, Lesqx.,		Ground.
B. convoluta, Hedw.,		Shady Ground.
B. cuneifolia, Brid.,		Shady Ground.
B. Wahliana, Schultz.,		Shady Ground.
B. Bolanderi, Lesqx.,		Rocks.
B. amplexa, Lesqx.		Shady Ground.
B. marginata, Bryol., Eu.,		Ground.
B. brevipes, Lesqx.,		Rocks.
B. inermis, Bruch.,		Rocks.
B. lævipila, Brid.,		Rocks.
B. latifolia, Brid.,		Borders of Creeks.
B. ruralis, Hedw.,		Rocks.
B. Muelleri, Brch.,		Rocks.
Grimmia, Ehrh.,		
G. conferta, Funk.		Rocks.
G. pulvinata, Smith.,		Rocks.

Latin Names.	English Names.	Natural Habitat.
G. trichophylla, Grev.,		Rocks.
G. Californica, Sullv.,		Rocks.
G. leucophæa, Grev.,		Rocks.
G. montana, Brch & Schp.,		Rocks.
Racomitrium, Brid.,		
R. canescens, Brid.,		Rocks.
Hedwigia, Ehrh.		
H. ciliata, Ehrh.		Rocks.
Braunia, Brch & Schp.,		
B. Californica, Lesqx.,		Rocks.
Zygodon, Bruch & Schp.,		
Z. Californicus, Muell.,		Shaded Rocks.
Orthotrichum, Hedw.,		
O. cupulatum, Hoffm.,		Trees.
O. Texanum, Sull.,		Trees.
O. speciosum, Nees.,		Trees.
O. rivulare, Turn..		Trees.
O. cylindrocarpum, Lesqx.,		Trees.
O. Lyellii, Hook,		Trees and Rocks.
O. pulchellum, Smith,		Trees.
Encalypta, Schreb.		
E. vulgaris, Hedw.,		Ground.
E. ciliata, Hedw.,		Shaded Rocks.
Physcomitrium, Brid.		
P. pyriforme, Brid.,		Swampy Places.
Enthostodon, Schwægr.		
E. Bolanderi, Lesqx.,		Banks.
E. Templetoni, Schw.,		Gravelly Soil.
Funaria, Schreb.		
F. Californica, Sull & Lesqx.,		Gravelly Soil.
F. calcarea, Wahl.,		Soil.
F. hygrometrica, Hedw.,		Everywhere.
Bryum, Dill.		
B. pyriforme, Hedw.,		Wet Borders.
B. Tozeri, Grev.,		Wet Borders.
B. albicans, Wahl.,		Hillsides.
B. torquescens, Bruch & Schp.,		Hillsides.
B. argenteum, L.,		Hillsides.
B. Californicum, Sull.,		Hillsides.
B. occidentale, Sull.,		Hillsides.
B. Canariense, Brid.,		Hillsides.
Mnium, L.		
M. affine, Bland,		Shady Banks.
M. venustum, Mitt,.		Shady Places.
Aulacomnium, Schwgr.		
A. androgynum, Schwgr.		Redwood Stumps.
A. palustre, Schwgr.,		Swamps.
Bartramia, Hedw.		
B. stricta, Brid.,		Ground.
B. fontana, Brid.,		Springy Places.
B. Menziesii, Turn.,		Rocks.
Atrichum, Tal. Beauv.		

[*Concluded in May No.*]

Medical Gazette:

It is a new rule of logic Dr. Kunkler erects when he says, (*Pacific Medical and Surgical Journal* for January and February, 1870) "denials and doubts cast on the existence of the soul, * * actually prevent a correct understanding of the action of the physical organs, and of the nervous system in general." If we did not doubt how could we improve? Doubt raises inquiry, inquiry acquires knowledge, knowledge corrects mistakes. Could Harvey have proved the circulation of the blood if he had not doubted and denied that those vessels contained wind? Whoever is satisfied with the present state of things is stationary as an oyster, and will never advance.

Dr. Kunkler "On the Mental Faculties" arraigns Virchow thus with other "clever scientists, by insufficient penetration into the subject, have been led to infer that man, as well as all the living creatures, are only automata, or self acting machines, and that therefore the existence of a soul is a mere fiction." The Doctor's "penetration into the subject" may be sufficient and deeper than that of Virchow's, but he has failed to show it, and his under-estimate of so distinguished a man in science is imprudent; if Virchow were to read Dr. Kunkler's articles, as he no doubt will lose no time in doing, he might say the Doctor exhibited a melancholy hardihood of opinion. We are curious to know what Virchow will think of this statement, page 339. "The vital process is continued during the whole of life's duration, until death." This is a good thing to know, it prevents us from hunting for the vital process after death, or in the dead subject, for a dead man is of no account only as he may serve the living. Why did he not add, a hen may lay, but she is good for nothing for eggs after death. The ten line sentence preceding the above quotation is, like most of the entire article in both numbers, too diffused, rambling, and muddled for comment. His range of discussion reaches over as much territory as the sermons of Lorenzo Dow. He strides with ease from Moses to A. J. Davis, from Aristotle to Virchow; and mixes up God, Atheism, and germ cells with hazardous proximity. It would have been fitting had Dr. Kunkler sung occasionally this refrain from Watts:

"Prone to wander, Lord I feel it."

On the next page he says, "the mind which is the instrument of intellection, composed of the nerve-cells seated in the gray matter of the convolutions." Is it possible he needs to be told intellection is a property of mind, and the brain the instrument of both? Then whoever supposed, besides this author, the mind is "composed of nerve-cells?" The blunder cannot be a slip of the pen, for he repeats the statement more than once, and speaks of "the nerve-cells composing the mind," as well might he note cells of thought, cells of motion, or cells of virtue; for we have seen the next thing thereto, a *sell* in a joke. Byron had a club-foot; for all that the Doctor gets the noble lord and his obliquities entangled in nerve centres, and has gone off and left him there. It is too bad!

On Page 343 he says: "The instincts are not spontaneous," and on the next page asserts "the animal instincts are *innate*." Whichever way he wants it, instincts can stand it, but one would naturally ask if instinct is not spontaneous, how can it be innate? He dives into Philosophy; moral, physical, metaphysical, intellectual, social, political, religious, medical, and judicial, but forgot to touch on woman's rights, and protracted meetings. On page 386, February, he slaps "reformatory theories" in the face; and on page 395 has the face to propose a reform in jurisprudence, and advises thus: "The courts of justice, in all criminal cases, should always be attended by some medical men," because of, or as he expresses it, "in the vague opinion of irresponsible judges, juries and lawyers." The oracle runs to waste in the following: "No woman, even in the uncivilized state, ever loses voluntarily her chastity, except by treachery, disease, vanity, or despair." Really these are exceptions enough to answer for most losses of the kind; but pray, where is the proof that disease and despair are voluntary?

Without feeling personal, unfair, or wicked, it may be said the author of the articles "on the Mental Faculties" has in nine pages in January, and ten in February, succeeded in making darkness sensible almost to the touch. The surprise is that such bosh should have obtained the compliment of print.

A. S. Hudson M. D.
Stockton, Cal.

CASE OF DEMENTIA CURED BY UTERINE TREATMENT.

By Wm. H. Davies, M. D.

On the night of the 27th March, I was called to see M. E. N., æt 26, married, and found her in the following condition: Terribly excited, requiring to be held so as to do herself no injury; face flushed, skin hot, pulse 100, full and strong; pupils dilated, respiration hurried, tongue furred and dry; complaining of severe pain in the epigastrium, and had vomited freely. She had been taking opium for three days without relief, but with evident aggravation of head symptoms. On being informed that

no action of the bowels had taken place for seven days, I ordered a copious warm enema to be at once administered, also 15 grains of calomel to be followed in four hours by half an ounce of castor oil. On the following morning I found all her symptoms improved, with the exception of the cerebral excitement, and prescribed a mixture of bromide of potassium and tinct. aconite, with rest—perfect quiet and milk diet. She remained in the condition just mentioned for about eight days, with occasional lucid intervals of five minutes, at other times highly excited, talking much nonsense and laughing immoderately. On the tenth day I found her much more rational and was able to obtain an imperfect history of her case, as follows: When about twelve years of age first menstruated, and becoming alarmed at the flow, plunged into a cold bath which immediately arrested it. From that time to the present has never menstruated properly, the period being always preceded by acute pain and only lasting a few hours, at other times has constant leucorrhœa and unceasing backache. A careful uterine examination disclosed the following: Os uteri almost totally occluded, cervix hypertrophied, and indurated uterus anteverted $2\frac{3}{4}$ inches in length; erosion of os.

I ordered warm hip baths every night with copious warm vaginal injections three times daily, applied four leeches in Douglas' space, which were afterwards repeated three times. After the lapse of eight days I introduced a sponge tent, removing it in 24 hours and injecting a solution of iodine, ac. carbolic and glycerine. No further uterine treatment was pursued for ten days, when a probe covered with cotton and saturated in the solution previously mentioned, was introduced up to the fundus and freely applied to the whole lining membrane. In three weeks from the commencement of uterine treatment, she menstruated, the discharge lasting about 30 hours, of better color than usual, and the pain attending its onset not nearly as severe as before. Six days after its disappearance I examined her, found the anteversion nearly gone, uterus measuring $2\frac{1}{2}$ inches, cervix much softer and hypertrophy lessened. I again introduced a tent followed by injection as before, and after fourteen days, an application on cotton. This constituted the entire uterine treatment. She has since made steady and uninterrupted improvement, her mental condition is perfectly restored, she now menstruates at regular intervals and in sufficient quantity without pain, and the leucorrhœa has disappeared.

This case is interesting from the fact of the existence for so long a time (14 years), of uterine disease and its complete cure by such simple means, together with the restoration of the mental faculties in their fullest energy. I may here state that the patient's mind had been more or less affected for a long time, and to such an extent, that her husband contemplated placing her in an asylum. It is further interesting from the complete disappearance of the anteversion without operative interference or use of support of any kind. At the date of this paper I am informed my former patient is pregnant, a sufficient guarantee of her complete cure.

POPLITEAL ANEURISM—LIGATIONS FOR.

By F. A. Holman, M. D., Surgeon City and County Hospital.

S., æt. 26, admitted into hospital June 26th, 1869, with large popliteal aneurism, of six weeks' duration, lately gave great pain.

July 1st. Ligature applied to femoral artery in Scarpa's space, patient being under the influence of chloroform.

July 18th. Ligature came away.

July 20th. Slight hemorrhage.

July 21st. Hemorrhage increased.

July 22d. Ligature applied to femoral below Poupart's ligament. The inflammation about the aneurism is such that it is deemed advisable to lay the aneurism open and turn out its contents.

August 8th. Ligature came away.

September 20th. Patient looking very well—walked out in the yard.

September 30th. Hemorrhage very slight from beneath Poupart's ligament.

October 6th. Hemorrhage continued at intervals until to-day, when it became profuse and a ligature was applied to the external iliac.

December 25th. Sloughing of leg and heel to such an extent as to render amputation necessary. Circular operation was performed; scarcely any hemorrhage, very few vessels bled.

January 2d. Died. The amount of blood lost at the several bleedings was considerable, and probably was the real cause of the death of the leg, as there was no appearance of want of circulation in it until after repeated hemorrhages.

AUTOPSIES MADE BY J. LETTERMAN, M. D. CORONER OF SAN FRANCISCO.

Reported by Edwin Bentley, Assistant Surgeon, U. S. Army.

Case 37. "Chloroform."

A. H. German, musician, aged thirty-five (35) years. Reported to have been in the habit of inhaling chloroform for severe neuralgic pains.

Autopsy twenty (20) hours after death; a short, compact, well-formed muscular physique; no exter-

nal marks of violence; rigor mortis distinct, placid countenance, pupils dilated; no evidences of commencing decomposition; suggillation of the dependent parts; Sectio Cadaveris.

Head. Bleeding from the wounds produced to raise the scalp; vessels of the membranes injected; brain hyperæmia; serum beneath the visceral layer of the arachnoid and flocculent lymph in it; an ounce of fluid in the dependent membranes.

Thorax. Lungs healthy, except being bound to the sides by strong, old pleuritic adhesions; heart normal, and blood fluid in all parts.

Abdomen. Stomach, pancreas, liver, spleen, kidneys and intestines presented no evidences of diseased action.

Remarks. Distinct odor of chloroform apparent after opening the chest, increased by making incisions in the lungs and opening the cavities of the heart; also manifest on opening the head and examining it.

Case 38. "Chloroform."

C. D., American, milliner, aged twenty-nine (29) years.

Autopsy about twenty-four (24) hours after death; no external marks of violence; rigor mortis present; pupils dilated, countenance placid; no purging or discharges from the external orifices; abdomen tympanitic, delicate physique, slender and somewhat emaciated, surface anæmic, except slight suggillations about the dependent parts; Sectio Cadaveris.

Head. No hemorrhage from the usual transverse incision of the scalp; skull thin; vessels of the dura-mater injected; white blood clots in the superior longitudinal sinus; visceral layer of the arachnoid raised with serum, in which floated flocculent lymph; substance of the hemispheres of maximum consistency; nearly two ounces of serum at the base of the cranium and in the dependent membranes.

Thorax. Lungs healthy, no pleuritic adhesion, heart flaccid, large white blood clot in the right ventricle, left empty.

Abdomen. Stomach relatively very large; liver large, yellow, fatty; spleen small; kidneys, pancreas and intestines normal, bladder empty, vagina dilated, hymen absent, ovaries healthy, unimpregnated uterus; slight abrasions like mucous ulcers about the os externum.

Remarks. When the cavities of the body were opened, a distinct odor of chloroform was evolved, which was increased by incisions in the lungs, opening the bronchi, bronchial tubes and air vessels, also in the sinuses and sections of brain. It will be observed in this case that blood clots were found in the heart and sinuses of the brain, while in the previous case the blood was found in a fluid condition. These phenomena are believed to be reconcilable from the rapidity of death in the former case and the comparatively slow and gradual process in the other.

Case 39. "Hanging."

J. F. Y., German, miner, aged sixty-three (63) years, found suspended by an inch Manila rope, fastened around the neck, with a slip noose on the left side.

Autopsy about ten (10) hours after death; slight rigor formed; blood and serum oozing from the left nostril; face livid, lips of a purplish hue; no indentation or impression made by the rope observable about the neck; pupils slightly dilated; a large, well-developed man; Sectio Cadaveris.

Head. Congestion of the scalp, bleeding from the transverse incisions, skull rather thin, meningeal arteries and sinuses distended with liquid blood, brain hyperæmic, serous effusion under the arachnoid and at the base of the brain, very free hemorrhage from the dependent membranes.

Thorax. Lungs congested and inflated; one ounce of serum in the pericardium; right side of the heart distended with fluid blood; left ventricle empty, with concentric enlargement.

Abdomen. Stomach full of solid food, mucous coat exceedingly inflamed, liver hard, congested, of a dark color, with rounded edges and cirrhotic form; kidneys, spleen and pancreas normal; intestines inflamed.

Remarks. No evidence of erection or emission; no fracture of crystalline lens or cervical vertebra.

Case 40. "Valvular disease of the heart."

M. H., Chilian, laborer, aged thirty-five (35) years, died suddenly on the street, while moving his furniture from one residence to another.

Autopsy eight (8) hours after death; rigor mortis present; no external marks; a well-developed man, medium size; when the body was moved, a thin liquid run from the mouth and nose; pupils slightly dilated; Sectio Cadaveris.

Head. Dark blood ran freely from the transverse incision of the scalp, marked anterior and posterior sloping of the skull from the vertex to the frontal and occipital protuberances; membranes congested; sinuses distended, and when opened the blood run in a full stream; pacchioni glands set in a dark yellow deposit of connective tissue.

Thorax. Lungs healthy; half an ounce of serum in the cavity of the pericardium; aorta and mitral

valves thickened and atheromatous; also patches of atheroma along the course of the large arteries.

Abdomen. The viscera of the abdomen presented no morbid condition worthy of note, beyond the inflamed surface of the mucous coat of the stomach.

Case 41. "Hæmoptysis."

W. G., Italian, sailor, aged forty (40) years, when found, face and neck were covered with blood which had run from the mouth and nose.

Autopsy twenty-eight (28) hours after death; marked cadaveric rigidity; pupils dilated; black, curly hair and finely formed features; Sectio Cadaveris.

Head. Free hemorrhage from the scalp; sinuses of the brain without coagulæ and readily bleeding; serum under the arachnoid; pacchioni glands prominent and set in connective tissue. On removing the top of the skull, drops of black blood are seen over the surface of the mater; effusion of serum at the base of the brain.

Thorax. Right lung partially carnified and bound down to the posterior walls of the chest by strong pleural adhesion; left lung full of extravisated blood, air passages more or less plugged with coagulæ of blood; mucous membrane of trachea stained of a dark red color from blood effused into the tissues. Heart small, cavities empty; no valvular lesions.

Abdomen. All the viscera have a pale anemic appearance, mesenteric glands enlarged; trubercles of the spleen quite distinct in the sections.

Case 42. "Infanticide."

M. R., male child, found dead, well developed for a new-born infant, afterbirth attached membranes complete, with the natural rupture of birth. *Autopsy* probably within forty-eight (48) hours after death; no decomposition, no cadaveric rigor, no external marks of violence observable; the presence of vernix caseosa noticed; Sectio Cadaveris.

No tumefaction of the scalp, no overlapping of the bones of the head; brain of the soft pultaceous appearance of infancy.

Thorax. Lungs filling the pleuritic cavities, partially inflated, respond promptly to the hydrostatic test, even after sections have been submitted to the pressure of one hundred and fifty (150) pounds they readily float in water.

Abdominal viscera normal, a little mucous in the stomach.

Remarks. This was unquestionably a case of infanticide, the hydrostatic test being regarded as conclusive, when corroborated by all the collateral conditions.

Case 43. "Hyperæmia of the brain and its membranes."

L. V., Italian, steward or butler, aged forty-nine (49) years, reported to be of quite unobtrusive manners and an habitual drinker of absinthe. He has been for some time without employment, and the subject of disappointed affection.

Autopsy, six (6) hours after death, no external marks of any kind; no suggillations; rigor mortis present; a well developed muscular physique; pupils slightly dilated. Sectio Cadaveris.

Head. Scalp congested; profuse hemorrhage from the usual incisions; vessels of the dura mater highly congested; blood run in a full stream from opening the superior longitudinal lines; blood drops rapidly appear on smooth sections of the hemispheres; four ounces of blood in the dependent membranes.

Thorax. Lungs inflated, right adhered posteriorally; fluid blood in the cavities of the heart; valves healthy; no infusion in the pericardium.

Abdomen. Liver very much enlarged and fatty; spleen and pancreas normal; large hydatid cysts in the left kidney; bladder distended; stomach and intestines healthy; omentum upon itself and laying above the stomach, leaving the anterior portion of the bowels.

Case 44. "Fracture of the skull."

A. F., Irish, milkman, aged thirty (30) years, found dead in his barn, having fallen from a hay-loft, a distance of ten feet.

Autopsy ten (10) hours after death; rigor mortis well-formed, fluids running from the mouth; serum running from the right ear; contusion of the posterior portion of the scalp; Sectio Cadaveris.

Head. Profuse hemorrhage from dividing the scalp, which is infiltrated with blood and serum; on removing the top of the skull a large coagula of blood is found to extend from the base of the brain over the right hemisphere of the cerebrum. The brain being removed a well defined fracture of the skull is brought into view, extending from the lambdoidal suture of the left side to the lambdoidal suture of the right, then extending forwards and inwards to the petrous portion of the temporal bone of the same side.

Thorax. Lungs and heart healthy.

Abdomen. The viscera of the abdomen normal; lacteals injected with milk.

Case 45. "Apoplexy."

P. D. G., Italian, washer, aged fifty (50) years.

Autopsy thirty hours after death, no external marks of violence; strong rigor present; diffuse suggil-

lations about the dependent parts; more marked about the face and neck; Sectio Cadaveris.

Head. Scalp congested and bleeding freely from dissection; pericranium intensely red; membranes of the brain injected; a stream of blood jets out from the opening of the superior longitudinal sinus; a small coagula at the base of the brain; sections of the hemispheres have marked hyperæmics; between the hemorrhagic dots the brain substance is of a yellow hue.

Thorax. Stasis of the lungs; strong pleuritic adhesions; cavities of the heart empty, valves healthy; walls of the right ventricles nearly as thick as the left; small atheromatous patches in the large vessels.

Abdomen. Liver normal; spleen soft, stomach inflamed on its inner surface, particularly about the larger curvature; Intestines and kidneys healthy.

Case 46. "Alcoholism."

C. D., Female, Irish, vagrant, aged, forty-five (45) years, accustomed to the inordinate use of stimulants, a subject of vice and its attendant exposures.

Autopsy thirty (30) hours after death; no external marks, vigor strong, redundancy of adipose; Sectio Cadaveris.

Head. Free hemorrhage follows the dissection of the scalp; the skull cap being removed the membranes are found congested, and underneath arachnoid an effusion of serum appears with shreds of flocculent lymph in it; sections of brain white and firm.

Thorax. Hypostasis of the lungs; slight old pleuritic adhesions; cavities of the heart contained fluid blood; no valvular lesions; no atheroma of the vessels.

Abdomen. peritoneal atttachment over the right lobe of the liver; pancreas, spleen and kidneys healthy; stomach enlarged; chronic catarrhal inflammation at the pyloric end of the greater curvature, presenting an uneven warty surface; uterus contains in its walls scirrhus tumors from one inch to one inch and a half in diameter; no disease of the ovaries.

CORRESPONDENCE.

Boston, Mass., March 15th, 1870.

Editors California Medical Gazette:

The annual commencement of the Medical Department of Harvard University, took place on the 9th inst. The graduating class numbered thirty-nine.

The class of 1869-70 has placed in the Hall of the Medical College a marble tablet bearing the names of twenty-one graduates and members of the medical school, who fell in the military and naval service of the United States, during the late war; a fitting and deserved tribute to the memory of gentlemen of noble and patriotic natures and superior professional attainments.

There have been a large number of surgical cases of unusual interest, in the wards of the City Hospital during the past winter, and the results in several of them have been beautiful exhibitions of the triumphs of conservative surgery. Aside from this class there have also been quite a number of cases of interest, one in particular: a case of irreducible omental hernia, with a small knuckle of intestine in the canal above it, which however, went back under the influence of ether. Dr. Cheever, who had previously diagnosed the exact nature of the case, cut down upon the omentum, freed it from its adhesions, ligated it just below the external ring, removed the portion below the ligature—a saucerful—and left the stump to plug up the canal. The patient did perfectly well, having no abdominal symptoms whatever. A small portion of the scrotum sloughed, which only aided in the completeness of the cure, which was perfect; the inquinal canal being perfectly and permanently occluded by the pedicle of omentum, and the integuments covering it well contracted, giving additional support. The patient, a stout and otherwise healthy young man, had previously been totally incapacitated for any manual labor whatever, in consequence of the pain and other inconvenience arising from the presence of the hernia. So far as I am aware, such a proceeding has not before been attempted, simply as a radical cure for an irreducible omental hernia, although of course, portions of omentum are sometimes removed in the operation for strangulated hernia.

Since the close of the late war I have been very strongly impressed with the marked difference in the degree of shock consequent upon injuries received in battle and those occurring in civil life. According to my observation it was a rare thing to see well-marked shock in the wounded in action, except in cases of severest injuries involving vital organs so called, or the large destruction of tissues, and almost necessarily fatal. I think it was the exception, unless there was excessive hemorrhage, that the carrying away of an extremity by a shell, or the perforation of the abdominal or thoracic cavities, gave rise to well-marked collapse, such as we constantly see attendant upon injuries of far less severe nature in civil practice, and very rarely indeed to its decided and severe forms; and in a great many of the cases of the classes referred to,

and those of similar character, there was either none at all or only the slighest approach to it. The wounded men come to the field-station whether one or twelve hours after the injury, almost entirely free from all signs of depression of the vital powers, and many of them in buoyant spirits. In civil life, however, all is changed. A man gets a crushed limb or a bad pistol shot wound, and shortly after we very commonly find him in a state of nearly perfect collapse, almost or quite unconscious, with feeble pulse and respiration, and it is necessary perhaps to wait for hours before any requisite operative procedure can be attempted; and then it is very poorly borne, and reaction is slow and imperfect. Why this difference? I suspect it is due more to the mental condition of the men at the time of the reception of the injury, than to any other cause. I doubt whether there is sufficient difference in the physical condition of the two classes, soldiers and civilians, to account for any considerable part of it, for I have noticed that among soldiers themselves, injuries received out of action were vastly more likely to be productive of vital depression than correspondingly severe injuries received in battle. As a general rule soldiers go into action with the mental faculties in vigorous play, the emotions slightly excited at least, and conscious that there is a possibility, to say no more, of their being disabled and perhaps killed outright. Under such circumstances a man sustains, for instance, a severe lesion of an extremity, his first thought is that he is fortunate not to get a worse wound; that he is now tolerably secure from further casualty, particularly if he is immediately removed to the rear; that he will probably get off with the loss of a limb and get out of a dangerous and tiresome service altogether. Thoughts of home flash through his mind and he comes to the operating station hopeful and in some cases in a really exalted emotional condition, and anxious for his turn to be placed upon the table. In civil life casualties are met under very different conditions. There being no anticipation or knowledge of any danger, the mind is totally unprepared for any untoward occurrence, and consequently, being taken by surprise, is wholly unable to withstand the impression produced by such an occurrence. The unfamiliarity with accident to which the soldier has become accustomed, naturally leaves opportunity for the indulgence of a greater fear of the ultimate result of the lesion in the civilian than in the soldier, which in turn necessarily increases the accompanying depression. J. B. T.

REPORTS OF SOCIETIES.

CALIFORNIA ACADEMY OF SCIENCES

At a meeting of the Academy of Sciences, March 7th, Dr. Blake, President, in the Chair, after several persons were proposed as resident members, Dr. A. R. Titcomb presented some specimens taken from tombs which had been exposed during the severe earthquakes in 1868, at Arequipa. They were supposed to be petrified human eyes, but in the opinion of the President and other members, they were considered to be vegetable productions—either seeds or roots. They will be subjected to microscopical examination.

CLIMATE OF CALIFORNIA—INTERESTING THEORY.

The President then read a memoir on the climate of California, more particularly in relation to our extreme seasons of drought and rain. After alluding to the laws which govern the general movement of the atmosphere—laws as inevitable and determinate in their action as the ordinary changes in the weather are apparently capricious—it was remarked that the polar and equatorial currents, which in the regions of the trade winds are superimposed th e one on the other, in the more northern or southern latitudes run in parallel streams over the surface as the earth, in southern or equatorial current, with the warmth and moisture, most frequently reaching the polar region over the surface of the larger oceans, whilst the polar currents predominate in the interior of the continents. These currents are evidently subject to the lateral displacements, and it is to these lateral displacements and to the mixing of cold and dry polar currents with the moist and warm equatorial current that most of the storms and rain in the temperate zone are to be attributed, and not, as is usually supposed, to the vertical descent of these air currents. These vast air currents often occupy a large portion of the earth's surface for considerable periods of time without apparently any lateral disturbance, causing extreme seasons of drouth or rain, as the region over which they prevailed were situated under a polar or equatorial current. In applying these laws to this State, it was stated that in our ordinary winters, our geographical position is such that we are situated about in the parallel where the two currents mix, so that the frequent lateral displacements to which they are usually subject give us a sufficient rain-fall; but in extreme seasons of drought we are more completely under a polar current, and in seasons of great rain-fall we are more in the equatorial current, or, more probably, about at the point where the greatest atmospheric disturbances take place. The influence of our mountain chains in deflecting the S. W. equatorial current is shown by our storms when we are fully under the influence of this current, being always accompanied by a S. E. wind, whilst in Europe the S. W. wind gives the most rain. The same barrier to the eastward, by opposing an obstacle to the sudden lateral eruption of masses of heated air into the colder northern current, prevents the occurrence of thunderstorms and cyclones in our State, and also, accounts, probably, for the barometer not falling so low in our southern storms as is equally the case in other portions of the temperate zone when equatorial storms prevail, the air being heaped up by striking against the Sierras. Illustrating the above observations by the more marked features of our climate during the present winter, it will be seen that our early rain in October was caused by our coming for a short time under the influence of the southern current which had been pre-

vailing in Oregon during the latter part of September and in October, causing very heavy rains. On this occasion the northern current was not displaced far enough for the equatorial current to reach the southern part of the State, although all the northern part of the State, as far as some 50 or 60 miles south of San Francisco, came under its influence. From October until February the northern current prevailed over the whole State, with occasional interuptions of moist air from the edge of the S. current which was prevailing at a hundred or two miles to the westward of the coast, as during the month of December, particularly, almost every ship that arrived reported heavy weather, with strong S. W. winds, at a short distance from the coast. About the 7th of February indications of the coming southerly current were observed, and on the 9th it reached the surface here about noon, although it was felt at Virginia City some hours earlier, as a S. W. storm of great intensity. The details of the last storm, as it reached different points of the State, were shown to be connected with the lateral displacement of the air currents, and from a comparasion of the weather here with that prevailing during the winter in the Western and in the Eastern States, it was shown that the breadth of the Polar current, near the western edge of which we were situated, lost its eastern border in the western part of the Mississippi Valley, whilst to the east of this an equatorial current has prevailed during the greater part of the winter, ensuring there a warm, moist season, whilst that part where the borders of two currents came into opposition has been marked by severe tornadoes and storms in the Mississippi Valley, on the eastern edge of the Polar current, and also on the western edge, at a short distance from our coast. At the time of the great displacement of the Polar current, on this side of the continent, it would seem that the southerly current there had been prevailing in the Eastern States was displaced in the same direction as the Eastern border of the Polar current reached the Atlantic coast, even in the Southern States, on the 21st—the time of the greatest lateral displacement on the coast; and it is an interesting fact that at the time these movements were taking place in the currents prevailing here, violent atmospheric disturbances were being felt on the Atlantic side and in Europe. There must undoubtedly be some law which governs these great atmospheric movements—some cause which makes a polar or equatorial current flow in some seasons for months apparently undisturbed between certain parallels of longitude, whilst in other years they occupy very different positions which in some seasons causes these vast air currents to flow in a broad and apparently stationary bed, and in other seasons to be subject to frequent displacements. If ever meteorology shall afford a scientific basis for predicting the character of our seasons, it must be by a more useful investigation of atmospheric currents.

Unfortunately, up to the present time but little attention has been paid to the subject under this point of view; but the extension of telegraphic communication over so large a portion of the northern hemisphere afford facilities for studying the subject, which it is hoped will not long be neglected. This continent, from the direction of our mountain chains being more or less parallel to the direction of the air currents, offers a much better field for their investigation than the old world, in which the principal mountain chains are at right angles to the currents, causing much greater and more irregular atmospheric disturbances.

CALIFORNIA PHARMACEUTICAL SOCIETY.

Secretary's report of the 10th meeting, held Monday evening March 14th. The meeting was opened at 8 P. M. by Mr. Simpson, Chairman of the Executive Committee.

The minutes of previous meetings were read and submitted to the meeting by the Chairman. The report was accepted. The usual report of the Executive Committee being next in order, Mr. Simpson stated that the several matters in charge of said Committee had received careful attention. After many attempts, a room had, he thought, been found, and we hoped to hold our next meeting in a hall to be rented by our own, and the Medical Societies.

The Secretary read various letters received by him since the last meeting; also one received by one of the members, Mr. Frost of Vallejo. This purported to be sent under sanction of some Eastern Medical College inviting the receiver to purchase a "Diploma," "the necessary entries to be made in the books of the College." The communication received the hearty condemnation of the Society, and some curious facts were stated by different members present. Mr. Perkins stated that a Diploma from the University of Heidelberg could be purchased. The conclusion of the meeting regarding such "offers" were that the exposure of such "Institutons" belonged more particularly to Physicians, and every right-minded Pharmacist would treat such letters with silent contempt.

Mr. Wenzell read an able and interesting paper upon "Some Analyses of Cincho Quinia" a compound manufactured by Nichols & Co. of Boston, purporting to represent all the therarpentic elements of Calisaya Bark.

His tests, which were rigid and searching proved that Cincho-Quinine was composed of Cinchonia and Cinchonidia, thus only partially representing the Bark. Mr. Wenzell suggested that the Alkaloid Cinchonia would prove a proper substitute for "Cincho-Quinine.

Mr. Searby suggested that it would be desirable to have some combination of the Alkaloids of (Cinchona Bark.) Mr. Steele made remarks upon the manufacture and composition of the "*Quinium*" of Delondre and Bouchardat; which presents the Alkaloids (deprived of the natural acids of the bark,) in the form of an extract.

Meeting adjourned at 10 P. M., until the second Monday in April.

JAMES G. STEELE.
Secretary.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 25TH, 1870.

GEORGE BURROWS, F. R. S., IN THE CHAIR.

ANOSMIA; CASES ILLUSTRATING THE PHYSIOLOGY AND PATHOLOGY OF THE SENSE OF SMELL. BY WILLIAM OGLE, M. D.

This paper began with an account of three cases which had fallen under the author's observation, in which total loss of smell was produced by a blow on the head. The author attributed the anosmia to rupture of the olfactory nerves, and pointed out how these nerves were especially liable to injury from blows on the occiput, which was the part struck in each case. Each patient complained not only of loss of smell, but also of loss of taste. True taste, however, was really unimpaired; what was lost was the power of recognizing "flavor," which are sensations compounded of smell and taste. These cases afforded an opportunity of

drawing a clear line between taste and smell, and showed that taste is limited to the perception of acid, salt, sweet and bitter. These simple tastes compounded with smells form "flavors." Various cases were then considered which seemed in contradiction with this opinion—cases, namely, in which smell was apparently lost, and yet the perception of flavors remained. These cases were explained, and the contradiction was shown to be only apparent. A second group of cases followed, in which anosmia resulted from lesion of the nerve-centres. It was shown that anosmia was a frequent accompaniment of aphasia, and it was argued that the explanation of this is to be found in the proximity of the so-colled external root of the olfactory nerve to the part of the brain usually affected in aphasia, a proximity which rendered the two parts very liable to be involved in one common lesion. The relative importance of the external and of the other roots of the olfactory bulb was considered, and it was held that the latter had little, if anything, to do in the perception of olfactory sensations. Lastly, a case of anosmia, recorded many years ago by Dr. Hutchinson, was discussed at length. A negro began, in his twelfth year, to lose his color, and, in a course of time, became perfectly white. The loss of color was accompanied by loss of the sense of smell, almost, if not quite complete. This seemed to have been hitherto considered a fortuitous coincidence. The author argued that such was in the highest degree improbable, and accounted for the anosmia by the destruction of the pigment of the olfactory region. Numerous arguments were used to show that this pigment plays an important part in olfaction, and that the keenness of this sense in man and mammals depends, in great part, on the intensity and extent of nasal pigmentation. Reasons were also adduced for believing that pigment is of use in the reception of auditory impressions, so that there would be a certain similarity in this respect between the three main organs of special sense, the eye, the ear, and the nose. Finally, an hypothesis was advanced as to the manner in which it operatse in olfaction.

Dr. Althaus complimented the author of the paper for the information which he had given on a subject regarding which little was known. Patients did not generally consult medical men on account of anosmia; hence the defect was in most cases discovered in accident. Anosmia was well known to be a not unfrequent consequence of injuries of the head; but he could not assent to Dr. Ogle's theory, that it was produced by injury of the olfactory nerves. He thought that it rather arose from rupture of blood-vessels and pressure on the olfactory nerves by the effused blood. He had observed in some cases, but not always, a combination of anosmia with aphonia. Dr. Ogle had not alluded to a case related by M. Claude Bernard of Paris, in which the olfactory nerves were found to be absent in a young woman. She was said to have had taste perfect, and to have been able to perceive the smell of fiowers and of stale tobacco. In a case under his, (Dr. Althaus's) care, the patient liked highly flavored Moselle. How was this to be explained by Dr. Ogle's view as to the connection of taste and smell? He had seen anosmia associated with epilepsy; one form of the epileptic aura was a disagreeable smell, sometimes preceding the attack by several days.—Dr. Broadbent had seen some cases of loss of smell which confirmed Dr. Ogle's remarks. In one case, after a fall from a horse, there was apparent fracture of the ethmoid bone, with loss of smell. In a second case, the patient was thrown on his back while riding: he remained unconscious for some time, and lost the power of smell. Taste was limited also, as in Dr. Ogle's cases. He had under his care a woman who had epileptiform attacks which commenced on the left side. After one or two attacks, she rapidly ost sight; and four months ago, she lost smell and taste. He thought that in Claude Bernard's case an inference as to smell had been drawn from the fact that the woman was fond of flowers. He could not agree with Dr. Ogle as to rupture of the olfactory nerves; nor as to the importance of the external root of the olfactory nerve. The middle and external roots were, he thought, of greater importance.—Dr. Webster said that affections of the sense of smell were very common in insanity; he thought that the disorder was real and not merely imaginary. Was there any relation between the whitening of animals in winter and a change in the power of smell?—Dr. Leared would like to have some information on cases where smell and taste were functionally disturbed without any history of injury. In a case of the kind under his care, he had, for want of a better explanation, assumed the existence of "concealed gout." He had lately under treatment a case of epilepsy, in which the attacks were preceded by an agreeable smell resembling that of peach-blossom.—Mr. R. B. Carter knew a gentleman who had lost taste and smell, but derived some pleasure from putrescent meat. He had, also, an increased power of using alcoholic drinks without becoming intoxicated.—Mr. Brooke said that Dr. Ogle's paper conveyed the idea that the universal medium of communication between external objects and the organs of sense was vibratory motion; and this was in accordance with what he had himself advanced in his works on the *Elements of Physic*.—Mr. Gascoyen had seen two additional cases of adhesion of the palate. In one, the patient desired an operation on account of the loss of smell. He had not consented to operation. In his cases, there was a small opening, and he had advised the patient to wait, which they had done with decided advantage; the thickening had subsided, and the opening had become larger. In another case, a lady had syphilis twenty years ago. About twelve years ago, she lost the bones of the nose, including turbinated bones. She had neither taste or smell; objects could be rubbed on the hard palate without producing taste. —Mr. Savory remarked, as to the effect of poisonous herbs on animals of different colors, that it was said all ate them, but were differently affected. Again, there were certain idiosyncracies irrespective of color. Dr. Ogle explained the absence of smell in some cases by the shutting off of the current of air; but closure of the anterior nostrils prevented taste also. If the olfactory bulb were a true ganglion, injury of its roots should not affect the sense of smell.—Dr. Ogle replied to the remarks of the various speakers; and the meeting adjourned.—*British Medical Journal.*

CLINICAL SOCIETY OF LONDON.

Berkeley Hill brought forward the notes of three cases of Thoracentesis, with the object of eliciting opinions respecting the value of this operation when applied to the cure of the varieties of pleuritic effusion—a method, which he ventured to think, had not received sufficient attention. The points which, Mr Hill thought, must particularly demand consideration were the following. 1. The removal of fluid from the pleura need hardly ever cause much danger or suffering. 2. Whenever effusion is copious, it is prudent to withdraw it to relieve dyspnœa and waad off a sudden fatal

termination. 3. The usual mode of leaving chronic effusions to natural resorption may be advantageously replaced by tapping, whenever the condition of the patient is stationary, and the pyrexia abated; the longer the fluid has existed the more urgent becomes the need for tapping, to enable the lung to expand before it has lost its power of doing so. 4. After tapping serous effusions, the wound should always be closed, at least until repetition of the evacuations had shown that cure would not be so effected; then to tapping injection of iodine or other irritants should be added, but in these cases the admission of air should be scrupulously avoided. 5 Where the fluid is purulent, the admission of air is immaterial, provided a free and continuous exit is maintained for the pus; and this free drainage is a cardinal point in the cure. One case illustrated the benefit from continued drainage by a tube passed across the chest through two openings; the second, the benefit which even cases of long-standing empyema, where the cavity will not contract, may obtain from frequent washing out with tepid water or other injections. The third showed how readily a serous effusion may be absorbed, even during the progress of rapid pulmonary phthisis and in this case evacuation gave temporary relief of a considerable amount, though it did not cure the effusion.—*British Medical Journal*

BIBLIOGRAPHICAL NOTICES.

Transactions of the American Ophthalmological Society. Sixth annual meeting, 1869; also of the *American Otological Society*, second annual meeting, 1869.

The transactions of the above societies come to us combined in one volume, of about 100 pages, and contain very valuable papers. One by Dr. Knapp on the inaccuracy introduced into the determination of visual acuteness by disregarding the magnifying or diminishing power of spectacles. He believes that positive glasses increase the visual power, so much so that with X 10 No. XX of Snellen should be read at 21.59 feet, and with X 5 at 23.44, etc.

An unusual case of vascular tumor of the iris, with a beautiful colored plate, by Dr. Roosa, constitutes an important and interesting paper. The case is reported in the appendix of the work on intra-ocular tumors by Dr. Knapp. Investigations on relative accommodations by Dr. Loring, is also very interesting.

Both Dr. Loring and Dr. Noyes presented improved ophthalmoscopes, to facilitate examinations of the upright image.

Dr. Agnew contends that the admission of light into the patient's room is a great advantage, and that his method of dressing the eyes after cataract, or other serious operations, viz: by a black silk domino, allows of its admission. We doubt if pressure assists the union of wounds in the eyeball.

Dr. Roosa presents a report on the progress of otology, which shows that diseases of the ear are being carefully studied, and with the result of improvement in their treatment.

Dr. Moreland gives the history of a singular case of deafness in connection with pregnancy. The deafness first came on at the time of a miscarriage, disappeared at each pregnancy to return at parturition.

Dr. Knapp reports a case of injury to the ear, from the use of the nasal douche.

Dr. Green, Boston, reports two cases of aspergillus—warm water was supposed to have been the parasiticide. Altogether the volume is very valuable and should be widely read.

The Cell Doctrine. Its History and Present State. For the use of Students in Medicine and Dentistry; also, a copious Bibliography of the subject. By James Tyson, M. D., Lecturer on Microscopy in the University of Pennsylvania, and on Physiology in the Pennsylvania College of Dental Surgery, etc., pp. 150. Philadelphia; Lindsay & Blakiston—1870. San Francisco; H. H. Bancroft & Co.

Upon the views we entertain of histological doctrines, must depend largely our physiological and pathological opinions, which latter influence so materially our diagnosis, prognosis, and treatment of diseases. We might take still broader grounds and claim for the cell doctrine that it is the foundation of our beliefs in regard to the relation which the organic sustains to the inorganic world.

Besides his own views the author gives in a condensed and clear manner, the views of previous writers. He is logical in his argument for the "vital force," and for the difference between organic and inorganic life, making the power of assimilation the distinguishing feature of organic life.

The work is worth procuring for the bibliography.

Modern Therapeutics. A compendium of recent formulæ and specific therapeutical directions. By Geo. H. Napheys, A. M., M. D., one of the editors of the Half-yearly Compendium of Medical Science. Philadelphia; S. W. Butler, M. D., 1870. San Francisco; A. Roman & Co.

Those of our readers who see the *Medical and Surgical Reporter*, will be more or less familiar with the plan and scope of its "*Therapeutical Bulletin.*" This little work is compiled on the same plan, and the author informs us was undertaken because of the favorable reception accorded to the "*Therapeutical Bulletin.*" The design is "to collect from recent medical periodicals, monographs, and systematic treatises, the utterances of experienced practitioners in relation to therapeutics."

Obstetric Aphorisms. For the use of students commencing midwifery practice. By Joseph Griffith Swayne, M. D., etc., etc., From the fourth revised English edition, with additions by Edward R. Hutchins, M. D. Philadelphia; Henry C. Lea--- 1870. San Francisco; A Roman & Co—pp. 177.

The object of this little volume is to furnish the student and those who are commencing the practice of midwifery, with a concise and accurate manual. It has been very favorably received by the profession in England, and we have no doubt but that it will become as popular here.

A Manual of Clinical Medicine, and Physical Diagnosis. By Thomas Hawkes Tanner, M. D., F. L. S. etc., Third American from the second English edition. Revised and enlarged by Tilbury Fox, M. D., London. Henry C. Lea, Philadelphia—12 mo. pp. 366. San Francisco; A. Roman & Co.

The author intends this as a manual for the student entering upon his hospital career. For those who use manuals, this will meet their requirements admirably. It is as practicable as it seems possible to make so condensed a work. The work contains not only a clear description of the symptoms, causes, diagnosis, and treatment of deseases, but of the different stages. Also a short discription of the modern appliances used for diagnosis. The practitioner may find the author's hints on examination of persons for life insurance, as well as those referring to medico-legal investigations, exceeding useful.

The Andes and the Amazon, or Across the Continent of South America. By James Orton, M. A., Professor of Natural History in Vassar College, etc., 8vo., 356. pp; Harper & Brothers.

A good book of travels is one of the rarest of the productions of the press, first because the world has been so thoroughly gone over as to deprive the subject of the air of novelty, and secondly, because so few who travel and give the public the benefit of their observations, have the information and power of description requisite to interest the reader. Those who have read *Bates' Naturalist on the Amazon*, only need to be told that this little book is a companion to that to ensure its perusal. It completes the description of the route across the continent of South America by way of Napo and Quito. Prof. Orton commenced his journey at Guayaquil, on the Pacific, and we have followed his narrative only as far as Quito, but it is safe to say that it is as fresh and instructive as though one had never read the travels of Humboldt and Darwin.

Some years since, the public were informed that a party of our countrymen, following the example of Agassiz, had set out to explore the unfrequented wilds of the tributaries of the Amazon and the Andes. This book is one of the results of this expedition. After leaving Quito, their route lay on foot through the forest to Napo, down the Napo by canoe to Pebas on the Marañon, thence by steamer to Para. Another division of the party entered Venezuela, making a voyage of two thousand miles through a little known, but deeply interesting region. The narrative of this expedition is promised soon.

The following extracts from the work before us will be read by the profession with interest, as everything must that relates to one of the most indispensable of our therapeutic agents. Alluding to the Cinchona tree he says:

"Dr Weddell enumerates twenty one species, seven of which are now found in Ecuador, but the only one of value is the C. succirubra (the Calisaya has run out) and this is now nearly extinct, as the trees have been destroyed to obtain the bark. In 1867 only five thousand pounds of bark were exported from Guayaquil. The Indians use the bark of another tree, the Maravillas, which is said to yield a much stronger alkaloid than Cinchona."

The following observations on the climate and diseases of Quito which lies under the equator at an elevation of nine thousand five hundred and twenty feet above the sea, will prove interesting:

"The mean diurnal variation of the barometer is only .084. So regular is the oscillation as likewise the variation of the magnetic needle, that the hour may be known within fifteen minutes by the barometer or compass. Such is the clock-like order of nature under the equator, that even the rains, the most irregular of all meteorological phenomena in temperate zones, tell approximately the hour of the day. The winds too have an orderly march, the ebb and flow of an ærial ocean. No wonder watch-tinkers can not live where all the forces of nature keep time. Nobody talks about the weather; conversation begins with benediction or compliments."

"There are only three small drug stores in the great city of Quito. The serpent is used as the badge of apothecary art. Physicians have no offices, nor do they, as a general rule call upon their patients. When an invalid is not able to go to the doctor he is expected to die. Yellow fever, cholera and consumption are unknown; while intermittent fevers, dysentery and liver complaints, so prevalent on the coast, are uncommon."

"The ordinary diseases are catarrhal affections and typhoid fever. Cases of inflammation of the lungs are rare; more coughing may be heard during a Sunday service in a New England meeting house than in six months in Quito. Asthma is also common in Quito while phthisis increases as we descend to the sea."

The prevalence of typhoid fever is due, in the author's opinion, to filth, poor diet, and the want of ventilation. The volume is replete with valuable observations in every department of science, and which only the perusal of the book itself will satisfy. It is for sale by A. Roman & Co.

Reptiles and Birds. A popular account of their various orders, with a description of the habits and economy of the most interesting. By Louis Figuier.

This book is another of the series of popular works from the French, that comprise the most elegant, entertaining and instructing on natural history that have ever appeared from the English press. One knows not which most to admire, the exquisite wood-cuts with which the book abounds, the quality and finish of the paper, the beauty of the letter press or the captivating style in which the information is conveyed. The whole execution of the work has never been surpassed, and furnishes one of the best illustrations of the progress of the art of book-making that we know of. The success of these works of Figuier, in the department of Natural History, has stimulated other authors in the same field and increased the impetus to the study of the animate world.

We are sorry for the man or boy that cannot derive the pleasure we feel in the perusal of a beautiful book, more especially one devoted to enlarging our acquaintance with the creatures with whose origin ours is so mysteriously connected.

The work is for sale by A. Roman & Co.

The degree of *Medicinæ Doctor*, requires an acquaintance with all the separate and special points of professional study, and it is a mercantile rather than a scientific spirit which attempts to apply to medicine the division of labor approved in industrial pursuits. The distinguishing feature in modern surgery, says one of its most learned interpreters, is the endeavor to unite in itself the whole of medical knowledge. No narrow proficiency nor shallow sciolism can ever reach the culminating pinnacle that crowns the medical fabric.—*Boston Medical and Surgical Journal.*

And at least secure to itself the *fees* of medicine at large. To use its specialty as a net to attract birds from every field, and selfishly appropriate the picking. The above paragraph from an excellent address, teaches a glaring error, and the author was led into it by the teaching, as interested as false, of the learned "interpreter" to whom he refers. It is a fling at the distinguished Gynæcologist in his neighborhood, who, probably drew this fire by the following remark:—Liken a noted authority in this city, a professor in Harvard College, had gained for himself an undeserved reputation among strangers as a practitioner, from an exceedingly limited actual experience:—writing physiological text-books for primary schools, first in writing rhyme. Is not that work for the advancement of medical science which Spiritualists have a right to demand from those who ridicule their own just claims.

The gauntlet's thrown and seized now at the "Hub"
When Greek meets Greek in combat,—comes the rub.

—*Nashville Medical Journal.*

A NEW MEDICAL SOCIETY.

Is started in Washington, embracing all colors, sexes, and sects of medicine. "Regular" and homœopath, male and female, black and white, are eligible to membership. Doubtless, science will be as much promoted as social intercourse in such an association.—*Medical Gazette.*

California Medical Gazette.

SAN FRANCISCO, APRIL, 1870.

☞ *All Letters and Communications to be addressed to the "Editors California Medical Gazette, care of A. Roman & Co., San Francisco."*

THE NECESSITY OF ORGANIZATION.

It is generally conceded that in no city on the civilized portion of the globe, are the arts of quacks and outlaws from the ranks of the medical profession, carried on more successfully than in San Francisco; nowhere are to be found so many charlatans thriving upon the credulity and fears of a people. There is no public sentiment to check it; lawyers, clergymen and merchants, lend their names to puff nostrums that are advertised in every daily and weekly paper in the State, with, we believe, the exception of the *Occident*, and these health-destroying compounds are sold over the counter of every apothecary in the city. If there is one exception, we will give that establishment a favorable notice on declaration of the fact by the proprietor.

To San Francisco belongs the honor of furnishing a Consul-General to a European State, whose claims rested on no higher grounds than wealth acquired by the most infamous of all forms of quackery.

With whom rests the responsibility of this thorough demoralization of the public sentiment regarding the status of medical men? It is not with the charlatans themselves, nor with the papers that advertise them; they consult their own interests here as elsewhere—with them it is business. It is chargeable to a want of co-operation in the profession itself; medical men stand coldly apart, singly or in cliques, from mutual antagonism if not hostility, and having no tribunal customary among communities of professional men to try the offences, take what they consider justice in their own hands, and animosities are engendered that are only allayed by death. Whether these causes of hostility are well founded or purely imaginary, or the result of misrepresentation, the result is the same. There is no cordial co-operation in anything that concerns the common welfare, but mutual repulsion and a common degradation. The cultivation of the medical arts, and the sciences on which they are founded, are neglected, and professional enthusiasm dies out like coals of fire scattered upon the hearth; its place is substituted by lower considerations, contracting

our sympathies, narrowing the scope of our social relations, until we cease to be felt as we ought in the social life of the people.

What has the medical profession done in California to stimulate the public sentiment toward the development of public charities, the erection and endowment of hospitals, to direct the civil authorities on great questions involved in sanitary regulations? What has it done to deserve the reputation of a liberal profession, for which it is distinguished in the Old World, and the great commercial centres of the Atlantic coast.

It is the disgrace of San Francisco and California that we have no hospital for the refuge of the thousands of sick strangers that are suffering in our midst; the best we can offer is an almshouse, which has always been overcrowded with our own poor. The only asylums for the sick now resident in the city are furnished by societies of foreigners organized for mutual aid and protection. The public naturally look to medical men to lead in these undertakings, to point the necessity, for they are the witnesses of the distress that meets them in their daily rounds. It is not because medical men in San Francisco are indifferent to these subjects that they have withheld their voices, but there is no class of men who are so reticent on questions of public importance as they in their individual capacity; there is an instinctive repugnance to being placed conspicuously before the public, it is at variance with their habits and tastes; but it is in their collective capacity that they can be felt, and it is a duty to the public from whom they derive their support, that they should be.

In alluding to this subject in a previous number, we have been charged with throwing a firebrand into the profession; the inference was made that we ignored the existence of a Medical Society in San Francisco.

Nothing could be farther from our intention than to add any thing to the causes of estrangement in our ranks, and if we have alluded to errors in the past it has only been that they may be avoided in the future. We, as well as the writer who attacked us, are too old to hope to gain anything by promoting discord, the little time that is left us in the ordinary course of nature, were better spent in extinguishing fire-brands than in adding fuel.

We are aware that an attempt was made two or three years since to affect the desired organization. We were of the original number who made the movement and used all the personal influence we possessed to accomplish the result; we were assured by those for whose professional career we had great respect, that they had no confidence in its success, most of them declined to join in the movement. We were on the committee to draft a constitution; that constitution made certain conditions to membership, among which was the signing the constitution. But before any signatures were given, and before by the terms of the constitution, there were any members, it was resolved to go into an election of officers. Thus the predictions of some and the fears of others were confirmed.

This unbecoming haste gave it a partisan character, and in our opinion killed the movement for any good purpose contemplated. The society has continued its existence, but has not gained in the confidence of the profession; the standard of qualifications for membership, originally low, has not been elevated—on the contrary, some that were rejected in the original call, for irregular practices, have been admitted without reformation so far as is known. One of its chief officers sells quack medicines over his counter. We do not believe it will ever secure the confidence of the great mass of the profession in this city. No organization can that does not plant itself squarely on the platform of the National Medical Association and insist upon a rigid enactment of all its provisions. On no other conditions can an organization be effected that will accomplish the objects to which we have referred. While the *San Francisco Medical Society* had adopted the code of ethics of the National Association, it was organized in notorious violation of them, as well as of common parliamentary usages, and it continues in fellowship those whose violation of them is well known.

The German physicians have formed an association by themselves, and although invited to unite with the *San Francisco Medical Society*, have peremptorily declined.

There seems to be no hope of a successful organization of the profession but through the younger class of men with whom the *esprit du corps* is paramount to all personal animosities and jealousies.

TO AN ANONYMOUS CORRESPONDENT.

We have been harassed by some anonymous letters in which the writer displays no small degree of indignation at our remarks on the improper bestowal of diplomas. His communications are conclusive evidence of the truth and fitness of what we said, for they are evidently from one whose only stock in trade is the diploma he possesses. That this diploma is misapplied is evident from the bad sense, bad grammar, and worse spelling displayed, and still worse manners. We take this occasion to say to our correspondent, that we do not

hold it a crime that you have a diploma, but we are sorry for the college that conferred it upon you; that you are ignorant and unfitted for the responsibilities is your misfortune, and that of the people who fall into your hands. The best advice we can offer you is to think less of the diploma, hide it away, labor to make yourself worthy of it by improving such opportunities as you have to make yourself a better member of society, and an intelligent physician, and there is yet hope for you. No man who is conscious of his merits and that his claims to public confidence rest on something else than his diploma, will take any offence at what we have said.

LEAD POISONING.

Dr. B.—Your communication came duly to hand. Do you not think that the paralysis of the leg is more likely to be due to the presence of the bullet or the injuries it caused, than to poisoning by absorption of lead from the ball? And that the paralysis will be more benefited by the removal of the ball than by the administration of iodidii pot. and bathing with sulph. pot. "to counteract the lead poison?" The pain in the sole of the foot is not certain evidence that the ball is lodged there. And as you say that the ball entered the hip, I would not advise you to cut into the sole of the foot with the hope of finding it.

THE GEOLOGICAL SURVEY.

It has been a cause of profound regret to all the friends of science on both hemispheres, that the great work which was undertaken some years ago by Professor Whitney, under the patronage of the State of California, should have been discontinued. Enough has been said by the public press to awaken our State Legislature to the error of its predecessor, and petitions have been poured upon it by the friends of learning from every quarter until the Senate by a large majority voted to continue the survey.

It is to be hoped the Assembly will do likewise, and that this good work will go on to its completion. [Since the above was in type, the bill has become a law.]

EXTIRPATION OF KIDNEY.

Professor G. Simon, of Heidelberg, reports having recently successfully removed a kidney of a woman, the ureter having been destroyed. It might possibly be as interesting to know if the woman is still living or how long she lived after the operation, as to know that the operation was successfully performed.

PROPOSED DERMATOLOGICAL ASSOCIATION.

A society to be called the *Dermatological Association* of Great Britain is being organized in London. The society is being organized chiefly for the purpose of continuing the publication of a journal devoted to that branch of medicine. The journal is to cost 10s. 6d. a year. To those of our readers interested in this branch of medicine, we are pleased to say, that the American Journal of Syphilography and Dermatology, which was noticed in our February number, has met with the warmest reception from the press, both in this country and Europe.

ENDOSCOPE.

Sir Henry Thompson considers the use of this instrument almost useless. In most cases it is unnecessary, and when necessary, painful to the patient and difficult of management. He also informs us that the instrument is nearly the same as that used by Mr. Avery of London, twenty-five years ago.

Dr. C. A. Robertson of Albany, who wrote the criticism on the treatment of Dr. Alden March's last illness, has raised considerable of a storm about his head. He has been expelled from the hospital staff and from the Albany Medical College. Is he a martyr to science or to his own capriciousness?

☞*Readers of the* California Medical Gazette *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received and acknowledged under "Communications received."*

MISCELLANEOUS.

THE SALE OF DIPLOMAS.

The exposure which has been made by several of our contemporaries of matters connected with sale of medical diplomas has nipped in the bud certain investigations which we had set on foot, by placing the suspected parties on their guard. We regret this the more inasmuch as the published evidence all relates to a single irregular institution, where we have reason to believe that similar practice might be fastened upon more than one college whose claims to orthodoxy are accepted by the American Medical Association. Our good intentions being thus frustrated, we are fain to content ourselves for the present with calling the attention of our Philadelphia brethren to the witness already borne against the alleged culprit in their midst.

The chief agent for the transaction of this commission business appears to be the person whose name is appended to the subjoined card, which has been extensively distributed throughout the country, in many instances without postmark; showing that the trade in degrees is sufficiently profitable to warrant the employment of numerous local subagencies.

COLLEGIATE AGENCY.

This Agency has been established for the purpose of giving such information as is generally necessary before entering upon a Collegiate Course of Study, or taking any of the learned Degrees.

Books, Medicines, Instruments, &c., will also be sent C. O. D. at market rates, upon receipt of orders.

Physicians' Practices sold on accommodating terms.

Through the recommendation of this Agency, Physicians, Lawyers, Clergymen and Teachers can obtain the Honors of all the Universities in the United States, such as the Degree of A. M., A. B., M. D., S. D. D., D. D., LL. D., &c. For additional particulars, address

A. J. Hale, M D., 214 Jacoby Street, Philadelphia.

The following correspondence, which we extract from the *Boston Medical and Surgical Journal*, will serve to show the value of the articles in which A. J. Hale, "M. D.," deals, especially as regards the "*free gratis*" diploma offered in the concluding epistle as a premium for clubs of three:

Mr. Editor,—Having read in your Journal of January 15th, a communication from "Lamoille," in reference to a "Collegiate Agency" in Philadelphia, I herewith send you a copy of a correspondence had with the same agency. Having obtained one of the cards, I at once wrote to the agency, as I was *desirous* of obtaining some *additional particulars*.

This correspondence was brought before our County Medical Society to-day, and action taken thereon.

These frauds are not, however, confined to the "Collegiate Agency;" some of our medical schools are also engaged in this nefarious business. During my residence in this country, no less than three diplomas have been obtained from medical schools by purchase, and were *sold* in each instance to notoriously incompetent practitioners of medicine.

Hoping that such exposures will have a tendency to cause all members of the regular profession to exert their utmost influence in having a stringent medical registration law enacted in their respective States,

I am yours respectfully,
Chas. H. Lothrop.

Lyons, Iowa, January 18th, 1870.

[copy]

Lyons, Iowa, November 22d, 1869.

A. J. Hale, M D.,
214 Jacoby St., Philadelphia, Pa.,

Dear Sir,—I have just received one of your cards, saying that an agency had been established for the purpose of giving information, etc., and the obtaining of diplomas for the different degrees. I wish to know by what means and the cost of obtaining a diploma from the University of Pennsylvania or New York.

I wish to get an M. D. I have been in the practice of medicine more than ten years. I have studied the required time, but was poor. Please give me all the information you can in reference to it; also your charge for getting it for me.

Yours truly,
Chas. H. Lothrop.

[copy.]

Philadelpia, Pa., November 25th, 1869.

Dear Sir,—Yours of recent date to hand. You can obtain through the recommendation of this agency, the degree of M. D. from a first class institution, for instance "Medical University" of this city. The faculty of this institution, which is at present in active operation, will grant you a diploma at a cost of $50; when two is granted at the same time, that is through the influence of the same person, for a different name, they can be had at $80 for the two. In other words, if you can influence another to take out a diploma, you save $10 to yourself. And *three* besides yours makes yours, (or the fourth one) *free gratis*. They will be sent you by express C. O. D. as soon as I receive your names in full as to enable me to have them printed correctly on diploma.

Let me hear from you soon.

Respectfully, A. J. Hale, M. D.
214 *Jacoby St., Philadelphia.*

Again, the editor of the *Chicago Medical Examiner* has received "three letters written by Dr. Hale to one of his correspondents:"

In the first he offers to furnish the diploma conferring the degree of M. D. for $80, and of A. M., for $50. In the second letter he puts down the price of the medical degree to $50, and urges his supposed applicant to send in his full name to be entered in the diploma at once.

The third letter is as follows:

Philadelphia, Pa., November 23d, 1869.

Dr.———:—

Dear Sir:—Yours of 19th inst. to hand. Did not think it necessary to specify all the institutions conferring degrees. If you wish to apply to an Allopathic, I refer you to the Dean of one institution, "American University of Philadelphia," Professor John Buchanan, Dean, 225 North 12th street. If you wish to apply to an Eclectic School, "Eclectic Medical College of Pennsylvania," Professor Joseph Sites, Dean, 514 Pine street, Philadelphia. Both schools regularly organized and chartered by the State Legislature, and honorable institutions. I refer you to the above-named gentlemen for any further information in regard to the schools.

Very respectfully,
A. J. Hale, M. D.
214 *Jacoby St., Philadelphia.*

It may perhaps be thought that the above letters, although sufficiently explicit as to the character of Mr. Hale's proceedings, fail to directly implicate the establishments in question, and, indeed, we are informed that the "faculty" of one of these institutions deny complicity in the issue of fraudulent degrees. On this point tolerably direct testimony is adduced by Mr. R. C. Sabin, from whose letter in the *Medical Investigator* of February we quote:

Milwaukee, December 30th, 1869.

Editor Medical Investigator: *Dear Sir:*—Seeing, in a recent number of *The Investigator*, an account of the experience of one of your correspondents in the matter of the sale of diplomas, I venture to send you a brief sketch of a correspondence of my own, with one of the venders of medical reputations.

Some time in October last I received a circular from one "A. J. Hale, M. D., 214 Jacoby street, Philadelphia," in which, among various other things, was the announcement that "through the recommendation of this agency, physicians, lawyers, clergymen," etc., could obtain the degrees of A. M., M. D., LL. D., S. T. D., etc., etc.

I wrote to this agent gravely, informing him that I wanted a diploma; that I would much prefer one from a Homœopathic College; but a diploma from some respectable school I must have. That I had "practised medicine some time" (probably amounting to twenty minutes in the course of my studentship,) and closed by inquiring terms, etc. A "happy thought" induced me to ask, in postscript, the terms

for an "A. M.," degree. Of this last no notice was taken, but the first part of my letter elicited the following, which is a "true copy:"

PHILADELPHIA, November 6th, 1969.

DR. R. C. SABIN: *Dear Sir:*—Your communication 2d inst. to hand. In reply will say that at present I am not prepared to issue from a Homœopathic school, but can obtain for you one from what I consider far superior to the above, that is, the "University" of this city, now in successful operation, with as eminent a corps of professors as any city in the United States can boast of, which will cost you $60, not to be paid for until it reaches you, sent by express, C. O. D., or otherwise, if desired. I guarantee it to be perfect in every respect, and genuine. If you send an order for it, please write your name in full, so that it may be printed correctly on your diploma. Hoping to hear from you at an early day.

I remain, very respectfully,

A. J. HALE, M. D.,

"214 *Jacoby St., Philadelphia.*"

After having had a hearty laugh with my preceptors over this precious epistle, the idea was advanced as to whether this rascal did not intend to convey the idea that it was the University of *Pennsylvania* that he was authorized to act for. To render it perfectly certain that there was no such stain on the fair fame of this noble institution, I wrote to the Provost inclosing a copy of the "agent's" letter. The reply was perfectly satisfactory; in the cource of it is said: "I am in constant receipt of letters from parties in the country and abroad, to whom applications similar to that made to you have been addressed. The impression that seems to prevail in some quarters that this institution has anything to do with the detestable business of selling diplomas, is wholly unfounded." "Sound!" said I, "that seems to fasten the matter, upon the University of *Philadelphia.*"

In the meantime my agent had become anxious, as I hadn't answered his first epistle, and under date of December 9th, addressed me as follows:—

Dear Sir:—Since writing you last the "Medical Board of Faculty" (can any one guess what that means) have reduced the price of diploma to $40. At least from one institution, "the Eclectic Medical College of Pennsylvania." If you would avail yourself of this opportunity, please do so before the present session closes this mo. For further information address the Dean, Prof. Jas. Sites, M. D., 514 Pine st.

Resp'y, etc. A. S. HALE, M. D.

"On this hint I wrote" to the Dean as aforesaid, solemnly protesting my desire for a diploma was strictly honorable, and "hence" I wanted a good one, and inquiring what guarantee I would have that "A. J. Hale, M. D., wouldn't swindle me by a forged diploma.

I annex an exact copy of the reply of the dean, Prof. Sites:

"*Phil., Dec. 15th,* 1869. *Dear Sir:*—I have just received your letter. I am well acquainted with A. J. Hale, who keeps an agency here for supplying books, meds., etc., to physicians. I had mentioned the facts to him some months ago, that if he knew any physician in good standing who would donate "(ah!)" forty to fifty dollars to our endowment fund, that we would confer upon him our Hon. degree. he has overreached the idea in favor of us, it has been an error of the hand more than the heart—as he stands well here.

"If you write a thesis and give us a certificate that you are a physician in good standing, and make such donation, I will recommend you for such a degree. Very truly yours,

JOS. SITES."

Seeing no prospect of getting anything more committal from this model representative of the "Eclectic Med. Col.," I wrote again to my "first love," "A. J. Hale, M. D." demanding a catalogue of his University, and intimating my doubts as to its having a "local habitation," although it seemed to have a tolerably long "name." His reply was short though not extremely sweet. He "inclosed card of Univ." "For further information better write the Dean." As I had evidently got the matter very nearly to a focus, I did write the Dean, Prof. Jno. Buchanan, inquiring point blank, "Is 'A. J. Hale, M. D.,' or any one else authorized to sell the diploma of the University of Philadelphia?"

To-day I receive his reply; it is as follows, *verbatim:*

"*Philadelphia, Dec.* 27, 1869.

"R. C. SABIN: *Dear Sir:*—A. J. Hale is a high-toned gentleman of strict integrity, and his word reliable.

Very truly yours,

"JOHN BUCHANAN."

Here then we have it at last; by referring to the agent's first letter, it will be seen precisely what this *high-toned reliable gentleman* proposed to do.—Med. *Gazette*, N. Y.

CLINICAL LECTURE ON PERIOSTITIS, ETC.

BY MR. PAGET.

The following is an abstract of a clinical lecture given by Mr. Paget:

The principal subject of this morning's lecture was *periostitis,* and especially the rare form of it in which the disease goes on to necrosis, without the implication of any tissues external to the bone, without the formation of pus, and consequently without sinuses. The sequestrum in such cases is found in a cavity whose walls are formed of soft granulations bounded by the immensely thickened periosteum, all the superficial structures being quite healthy. The results are an enlargement of the bone, generally involving the *whole circumference of the shaft;* constant pain, which is often worse at night; and tenderness on pressure.

We have to distinguish such a case, 1st, *cancer,* in which, however, the increase in size is usually much more rapid than in these cases of marked necrosis, while the pain is neither so constant, nor is it liable to special nocturnal exacerbation; while, lastly, the tumour in cancerous disease, does not uniformly surround the shaft of the bone. 2. In certain low, somewhat flat, bony, or cartilaginous *outgrowths* from the surfaces of long bones, especially the femur, the growth occurs from only one part of the circumference of the shaft, and it often becomes complicated by the formation of a bursa over its surface, while it is liable to attacks of periostitis, accompanied by the usual signs of that disease.

The patient whose case illustrated these remarks was a servant girl who had been treated for pain in the knee for some weeks before admission. She presented, on admission. a considerable uniform enlargement of the shaft of the femur, tender and painful. She stated that she had been in the habit of breaking sticks across the thigh—a circumstance that Mr. Paget thought of some interest in the absence of other ascertainable causes of the disease. She was kept under

observation for about three months, during which time blisters, complete rest, and gradually increasing doses of iodide of potassium, gave her only partial and temporary relief from pain. There was not much increase in the size of the swelling during this time.

The pain remaining, and there being no positive signs of malignancy, Mr. Paget cut down on the enlarged femur, and removed from the swelling a piece of dead bone about an inch and a half in length. The periosteum was much thickened, and the cavity containing the sequestrum was lined by soft granulations.

Two other cases were alluded to. In one, the humerus enlarged so rapidly as to simulate cancer; but an incision showed cavities containing some inspissated pus and pieces of dead bone; there were no sinuses. The other specimen consists of the femur and tibia of a man whose history is unknown. There is abundance of new bone surrounding a necrosed portion of the shaft in each bone; but there are no sinuses.

In speaking of the treatment of periostitis, Mr. Paget advocated the use of *repeated blisters* especially in the "relapsing pereostitis," which often occurs in the neighborhood of united fractures particularly (in old people,) or at least the seat of former necrosis. Iodide of potassium influences chiefly periosteal inflammations—not inflammation of the bone substance; and Mr. Paget thinks that the different forms of periostitis are influenced by the iodide in something like the following order, 1. Syphilitic; 2. Chronic Gouty Periostitis; 3. Scrofulous Periostitis; 4. That form associated with Chronic Rheumatic Arthritis, over which iodide of potassium has no power at all.

Sloughing in cases of Damage to the Spinal Cord—Mr Paget made some remarks on this subject in coneection with a patient who has been in a hospital for several months, suffering from partial paralysis after severe concussion of the spine. The man received an injury to the spinal cord three years ago; he recovered from the partial paralysis so far as to be able to resume his work, until he met with a second accident, which caused concussion and very considerable impairment of sensation and motion below the original seat of injury. Soon after the second injury, sloughing of the skin of one foot occured. Mr. Paget considers that this case well illustrates the facts that simple *loss* of nerve-power is followed only by *wasting* of the paralysed parts; but that if, in addition to loss, there is *disturbance* of nerve-force, we then find disturbances of nutrition quickly following the injury, such as extensive bed-sores and sloughing of integument on the feet. After the first injury, this man's spinal cord was simply weakened, probably; after the second accident, it was irritated as well, and accordingly, portions of his skin quickly died. Mr. Paget remarked, also, that if sloughing does take place from irritation of the cord, it always comes on soon after the injury or disease; if we can prevent bed-sores during the first week or two, the patient is nearly safe.—*British Medical Journal.*

RECIPE FOR BURNS.

Make a saturated solution of alum (four oz. in a quart of hot water.) Dip a cotton cloth in this solution and apply immediately on the burn. As soon as it becomes hot or dry, replace it by another, and continue doing so as often as the cloth dries, which at first will be very few minutes. The pain will immediately cease; and after twenty-four hours of this treatment, the burn will be healed, especially if commenced before blisters are formed. The astringent and drying qualities of the alum will entirely prevent their formation. The deepest burns, such as those caused by boiling water, drops of melted metal, phosphorus, gunpowder, fulminating powder, etc., all have been cured by this specific. —*Chicago Medical Journal.*

SYRUP ETHER.

This preparation is much used in France, in cases where the employment of ether is indicated; it will be found especially useful in sick headache. The following formula furnishes a syrup rich in the medicinal principle, of a fixed composition, and which is not disturbed by the variations of temperature: Introduce into a flask 44 grains of sugar; 49 grains of distilled water; 5 grains of alcohol, 90°; and 2 grains of pure ether. Agitate and preserve.—*Eclectic Medical Journal.*

LACTIC ACID IN CROUP.

℞. Acid lactici gtt. xv ad gtt. xx; aq. ℥ ss M., may be used to advantage in croup. This quantity to be used every half hour with an inhaling apparatus, diminishing the acid to gtt. x, then to gtt. v, and inhaling it but every half hour for two hours, when the dyspnœa decreases, which is said to disappear entirely in seven, ten, or twelve hours. Protect the eyes and face from the vapor. Dr. Webb prescribes, besides this local treatment, the following internally: ℞. Sodæ bicarb., ℥ ij; aq. ℥ iv. M. Sig. A tablespoonful every half hour, or every hour, till the dyspnœa disappears. —*Medical Gazette.*

BOOKS AND PAMPHLETS RECEIVED FOR NOTICE.

Bennett's Practice of Medicine.

Chemical Examination of Urine—Flint.

Diseases of Children—Meigs and Pepper.

Bellevue and Charity Hospital Reports—1870.

Smithsonian Reports—1868.

Contributions to Practical Laryngoscopy. By A. Ruppauer, M. D.

Braithwaite's Retrospect of Practical Medicine and Surgery, Part LX—Jannary, 1870. Published by Townsend and Adams, N. Y., $2 50 per year.

The Half-Yearly Abstract of the Medical Sciences. Being a Digest of British and Continental Medicine, etc. Part L, 1870. Published by Henry C. Lea, Philadelphia. $2.50 per year.

Report of the Committee on the Relations of Alcohol to Medicine. By John Bell, M. D., Chairman. (Extracted from the Transactions of the American Medical Association.)

The Physical and Medical Topography, including Vital, Manufacturing and other Statistics of the City of Wheeling. By James E. Reeves, M. D., City Health Officer, etc.

Relaxation of the Pelvic Symphysis during Pregnancy and Parturition. By Frederick G. Snelling, M. D.

Half-Yearly Compendium of Medical Sciences. Part V, January 1870. Philadelphia; S. W. Butler, M. D. Terms $3.00.

Latin Names.	English Names.	Natural Habitat.
A. undulatum, Tal. Beauv.		
Polytrichum, Dill.		
P. juniperinum, Hedw.,		Rocky Ground.
Fontinalis, Dill.		
F. antipyretica,		Streams.
Dichelyma, Myr.		
D. Swarzii, Lindb.		Swamps.
Neckera, Hedw.		
N. Menziesii, Hook,		Trees.
N. Douglasii, Hook.,		Trees.
Alsia, Sull.,		
A. Californica, Sull.,		Rocks & Trees.
A. longipes, Sull & Lesqx.,		Rocks.
A. abietina, Sull.,		Trees.
Antitrichia, Brid.,		
A. curtipendula, var. gigantea, Sull & Lesqx.,		Rocks.
A. Californica, Sull.,		Rocks & Trees.
Anomodon, Hook & Tayl.		
A. Californicum, Lesqx.,		Ground.
Fabronia, Raddi.		
F. pusilla, Raddi.		Trees.
Pterogonium, Swartz,		
P. gracile, Swartz,		Rocks & Trees.
Hypnum, Dill.		
H. crispifolium, Hook,		Rocks.
H. leuconeurum, Sull & Lesqx.,		Ground.
H. myosuroides, L.,		Shaded Rocks.
H. stoloniferum, Hook,		Shaded Rocks.
H. Brewerianum, Lesqx.,		Shaded Rocks.
H. aggregatum, Mitt.,		Shaded Rocks.
H. Nuttallii, Wils.,		Trees.
H. arenarium, Lesqx.,		Sandy Soil.
H. pinnatifidum, Sull & Lesqx.,		Rocks.
H. vallium, Sull & Lesqx.,		Streams.
H. Bolanderi, Lesqx.,		Shady Ground.
H. illecebrum, Schwagr.		Shady Ground.
H. cæspitosum, Wils.		Shady Ground.
H. Californicum, Lesqx.,		Trees.
H. Stockesii, Turn.,		Borders of Streams.
H. Oreganum, Sull.,		Rocks & Trees.
H. rusciforme, Weis,		Wet Rocks.
H. Bigelovii, Sull.,		Shady Wet Borders.
H. serpens, L.,		Willow Swamps.
H. riparium, L.,		Borders.
H. aduncum, Hedw.,		Swamps.
H. subimponeus, Lesqx.,		Rocks & Stumps.
H. circinale, Hook,		Redwood Stumps.

Hepaticæ. (*Liverworts.*)

Sub-Order I. Ricciaceæ.

Riccia, Mich.		
R. glauca, L.,		Borders of Ditches.

Latin Names.	English Names.	Natural Habitat.
R. nigrella,		Gravelly Soil.
R. lamellosa, Raddi.,		Gravelly Soil.
R. crystallina, L.		Gravelly Soil.
Sphærocarpus, Mich.,	Round Headed Liverwort.	
S. Michelli, Bellard,		Clay Soil.
Sub-Order II. Authoceroteæ.		
Anthoceros, Mich.,	Horned Liverwort.	
A. punctatus, L.		Shady Banks.
A. lævis, L.,		Shady Banks.
Sub-Order III. Marchantiaceæ.		
Targionia, Michel,		
T. Michelii, Corda.,		Moist Shady Rocks & Banks.
Marchantia, L.,	Brook Liverwort.	
M. polymorpha, L.,		Wet Places.
Grimaldia, Raddi.		
G. Californica, Gottsche,		Banks.
Fimbriaria, Nees.,	Small Liverwort.	
F. tenella, Nees.,		Moist Shady Hillsides.
F. Bolanderi, Austin,		Banks.
F. Californica, Hpe (Lescurii Austin)		Around Rocks.
Sub-Order IV. Jungermauniaceæ. (*Scale Mosses.*)		
Aneura, Dum.		
A. pinguis, Dum.,		Shady Banks.
A. palmata, Nees.,		Shady Banks.
Pellia, Raddi.		
P. calycina, Taylor,		Shady Banks.
Fossombronia, Raddi.		
F. pusilla, Nees.,		Wet Shady Banks.
Jungermannia, L.,	Scale Moss.	
J. rubra, Gott,		Rocks.
J. biscuspidata, L.		Swamps.
Scapania, Lind.		
S. undulata, Nees.,		Trees.
S. Californica, Gott,		Trees.
Sarcoscyphus, Corda.		
S. Francisci, Gott,		Stumps.
Frullania, Raddi.		
F. Petalumensis, Gott,		Bark.
F. unciflora, b. Californica, Gott,		Bark.
F. Bolanderi, Aust.,		Bark.
F. Tamarisci, Nees., ?		Rocks.
Madotheca, Dum.,	Tree Scale Moss.	
M. rivularis, Gott,		Trees.
M. platyphylla, Dum.,		Trees & Banks.
Lepidozia, Nees.,	Creeping Scale Moss.	
L. reptans, Nees.,		Stumps.
Radula, Nees.		
R. complanata, Dum.,		Bark.

Latin Names.	English Names.	Natural Habitat.

Lichenes. (*Lichens.*)

Tribe I. Parmeliacei, Fr.

Ramelina, Ach.		
R. Menziesii, Tayl.,		Trees & Fences.
R. homalea, Ach.,		Rocks at the Coast.
R. ceruchis, Ach.,		Trees.
Cetraria, Ach.		
C. Californica, Tuck.,		Fences & Trees.
C. glauca, Ach.,		Trees & Coast.
C. lacunosa, Ach.,		Pine Trees.
C. ciliaris, Ach.,		Trees.
C. juniperina, Ach.,		Pine Trees.
Evernia, Ach.		
E. vulpina, Ach.,		Trees.
E. prunastri, Ach.,		Trees.
Usnea, Hoffm.		
U. barbata, var.,		Trees.
Theloschistes.		
Th. chrysophthalmus,		Fences.
Th. parietinus, L. var Finmarkicus, Ach.,		Rocks.
Parmelia, Fr.		
P. perlata, Ach., var flavicans,		Rocks.
P. perforata, Ach.,		Rocks.
P. saxatilis, Fr.,		Rocks.
P. physodes, Ach.,		Trees.
P. olivacea, Ach.,		Trees.
P. caperata, Ach.,		Rocks.
Physcia, Schrbr.		
Ph. erinacea, Tuck.		Wood.
Ph. speciosa, Wulf.		
Ph. stellaris, L.		
Umbilicaria, Hoffm.		
U. phœa, Tuck.,		Rocks.
U. hirsuta, DC.,		Rocks.
U. angulata, Tuck.,		Rocks.
Sticta, Schreb.		
H. fuliginosa, Ach.,		Mossy Rocks.
H. anthraspis, Ach.,		Oak Trees & Rocks.
H. pulmonaria, Ach.,		Trees.
H. scorbiculata, Ach.,		Mossy Rocks.
Peltigera, Willd.		
P. aphthosa, Hoffm.,		Ground.
P. canina, Hoffm.,		Mossy Rocks.
P. rufescens, Hoffm.,		Trees & Rocks.
P. polydactyla, Hoff,		Trees & Ground.
P. venosa, Hoffm.,		Mossy Ground.
Pannaria.		
P. microphylla, Massal,		Mossy Rocks.
P. lepidiota, Fr.,		Mossy Rocks.
P. cyanolepra, Tuck.,		Ground.

Latin Names.	English Names.	Natural Habitat.
Dirina, Fr.		
D. Californica, Tuck.,		Oak Trees.
Placodium.		
P. coralloides, Tuck.,		Rocks.
P. callopismum, Merat,		Rocks.
P. bolacinum, Tuck.,		Rocks.
P. cinnabarrinum, Anz.,		Rocks.
P. vitellinum, Ehrh.,		Rocks.
Lecanora, Ach.		
L. Bolanderi, Tuck.,		Rocks.
L. phryganitis, Tuck.,		Rocks.
L. thamnitis, Tuck.,		Rocks.
L. muralis, Schreb.,		Rocks.
L. pinguis, Tuck.,		Rocks.
L. varia, Ach.,		Rocks.
L. pallescens, Schær.,		Trees.
L. pallida, Shær.,		Trees & Rocks.
L. glaucoma, Ach.,		Rocks.
L. Cenisia. Ach.,		Rocks.
L. subfusca, Ach.,		Rocks.
L. atra, Ach.,		Rocks.
L. fecunda, Tuck.,		Trees.
L. cinerea, Sommerf.		Rocks.
L. Scheicheri, Nyl.,		Wood.
L. xanthophana, Nyl.,		Rocks.
L. rubina, var opaca,		Pines.
L. Brunonis, Tuck.,		Rocks.
Rinodina,		
R. sophodes, Ach.,		Trees.
R. sabulosa, Tuck.,		Ground.
Pertusaria, DC.		
P. pertusa, Ach.,		Trees.
P. Wulfenii, Nyl.,		Trees.
P. velata, var,		Oak Trees.
Urceolaria, Ach.		
U. scruposa, Ach.,		Ground.

Tribe II. Lecideacei, Fr.

Stereocaulon, Ach.		
St. paschale, Tr.,		Ground.
Cladonia, Hoffm.		
C. Santensis, Tuck.,		Ground.
C. pyxidata, Fr.		Ground.
C. gracilis, Fr.,		Ground.
C. fimbriata, Fr.,		Ground.
C. bellidiflora, Schær.,		Ground & Trees.
Biatora, Fr.		
B. globifera, Fr.,		Rocky Soil.
B. decipiens, Fr.		Rocky Soil.
B. scotopholis, Tuck.,		Rocky Soil.
B. coarctata, Fr.,		Rocky Soil.
B. glebulosa, Fr.		Rocky Soil.

Latin Names.	English Names.	Natural Habitat.
Lecidea, Ach.		
L. enteroleuca, Ach.,		Rocks.
L. insularis, Nyl.,		Rocks.
L. ruginosa, Tuck.,		Rocks.
L. massata, Tuck.,		Gravelly Soil.
Buellia.		
B. radiata, Tuck.,		Rocks & Coast.
B. Bolanderi, Tuck.,		Rocks.
B. lactea, Kœrb.,		Rocks.
B. stellulata, Tayl.,		Rocks.
B. pullata, Tuck.,		Rocks.
B. halonia Ach.,		Rocks.
B parasema, Kœrb.,		Rocks.
B. parasitica, Fr.		Rocks.
B. oidalea, Tuck.,		Trees.
B. geographica L.,		Rocks.
Tribe III. Graphidacei, Nyl.		
Opegrapha, Pers.,		
O. varia, Fr.,		Trees.
O. vulgata, Nyl.,		Trees.
Tribe IV. Caliciacei.		
Sphœrophorus, Ach.,		
S. globiferus, DC.,		Stumps.
Acolium.,		
A. Californicum, Tuck.,		Rocks.
A. Bolanderi, Tuck.,		Rocks.
A. chloroconium, Tuck.,		Trees.
A. tigillare, Fr.,		Trees.
Calicium, Pers.,		
C. subtile, Fr.,		Pines.
C. chrysocephalum, Ach.,		Pines.
C. hyperellum, Wahl.,		Pines.
Tribe V. Verrucariacei, Fr.		
Dermatocarpon.,		
D. mineatum, Eschro.,		Ground.
D. Guepini, Moag.,		Ground.
Collema, Ach.,		
C. nigrescens, Ach.,		Trees.
C. coccophorum.,		Ground.
Leptogium, Fr.,		
L. palmatum, Mont.,		On Mosses.
L. muscicola, Fr.,		On Mosses.
L. albociliatum, Tuck.,		Rocks.
L. Californicum, Tuck.		Rocks.

ORIGINAL COMMUNICATIONS.

DIARRHŒA.

By C. F. Buckley, B. A., M. D.

Read before the San Francisco Medical Society, at their first meeting in March, 1870.

Mr. President and Gentlemen:—

I have adopted the generic term at the heading of this paper, in order to make ample allowance for any deviation beyond the limits which I wish to assign to myself. It is however, quite unnecessary to remind you that the merest superficial glance over the whole field of observation comprehended in this term, would be completely beyond the reach of any one paper.

There are, I am of opinion, in reference to this question, two things which we should never lose sight of: 1st. That diarrhœa is a symptom not a disease. 2d. That we should invariably have regard both to the quality and quantity of the excreta. I may tell you *in limine* that the branch of the subject with which I mean to burthen your patience, is that which is known as Simple Diarrhœa, dwelling more especially on the division popularly named Summer Cholera, omitting as far as possible all consideration of those forms of diarrhœa dependent on organic disease, or those toxæmic diseases as cholera and typhoid fever, of which it is an almost essential symptom, as well as those varieties induced by the action of various purgative drugs. Simple diarrhœa, according to the best authorities that I have been able to consult on the subject, may be divided —a division necessarily somewhat artificial and arbitrary—into six different varieties: 1st. Catarrhal diarrhœa. 2d. Nervous diarrhœa. 3d. Metastatic. 4th. Catarrhal diarrhœa with catarrh secondary to the diarrhœa. 5th. Diarrhœa induced by excessive tonicity of the intestinal walls. 6th. Diarrhœa the result of excessive or deleterious food, which qualities may depend either on the character of the food itself, or on the idiosyncrasy of the individual. To these six subdivisions of the subject I have myself taken the liberty to add a seventh, viz: Summer Cholera, both because I think it has not hitherto been satisfactorily explained, and at the same time has characteristics sufficiently distinct to entitle it to a separate place, as I shall endeavor to show.

The first or Catarrhal Diarrhœa, which is said to be the most common form of all, though I doubt very much if it is, arises generally from the same causes that produce catarrh of the mucous membranes elsewhere in the body. We know that of a given number of people, who have "caught cold," as the commodiously vague expression runs, some will have catarrh of the sneiderian membrane, others of the fauces, others of the bronchi; some will suffer from an attack of vesical catarrh, and others again will undergo the inconvenient troublings of diarrhœa. So it is also as a consequence of specific diseases, which produce in a secondary manner, catarrh of the various mucous surfaces. For instance, most persons attacked by measles, small-pox or scarlatina, suffer from coryza to a greater or less extent, but in some the conjunctiva is more subject to inflammation, while in not a few the intestinal mucous membrane has to bear the chief onus of the complication. As an important point in diagnosis, it is also worthy of remark that in either this common or specific catarrh of the intestinal mucous membranes, the diarrhœa is subject to considerable variation, both as regards the quantity and quality of the excreta. The inflammatory action may spread to either the stomach, liver or pancreas separately, or to all combined, and so modify, as each or all of these organs may be affected, the condition of the discharges. If the stomach is principally inflamed, we may expect to find in the stools a quantity of crude, undigested material, part of what was previously received into the organ; if, on the other hand, the liver has chiefly suffered, bilious matter principally predominates, and if the history be not steadily kept in view, this fact may considerably affect the diagnosis as to the original nature of the diarrhœa.

In the second or nervous diarrhœa, we witness only one of the manifold manifestations of the immense power wielded by the nervous system over every tissue of the economy. It is constantly observed how toothache stimulates the salivary glands; how neuralgia excites the lachrymal or other glandular organs near the seat of pain. You all know, for a longer time probably than I have observed it, how a sudden cold douche to the skin will not only commonly excite the desire to micturate, but very often also produces a sudden inclination to defæcate, and nothing is more common among bathers, on taking off their clothes, than the disposition to perform both those offices. These effects are no doubt due to a purely reflex nervous action; but it is quite obvious that moral causes are not less powerful than material, in producing the same. Nothing is more commonly observed than the suddenness with which an accession of fear, joy or anger can dispel *in toto* all the cravings of a hungry stomach, or check the secretion of milk in the nurse's bosom. So it is also with the question before us. Diarrhœa among retreating or routed armies is a fact so universally known, that I must bear the charge of idle repetition by at all alluding to it and I presume very few medical students

have ever undergone a single day's University cross-examination, without, at some period of the trial, having suffered from a greater or less accession of looseness of the bowels. The strangest case of emotional power in this regard I ever knew, was that of a very intimate friend of my own, who usually suffered much from constipation, being naturally of very studious habits, but invariably *enjoyed* a tolerably brisk diarrhœa, after having been to church on Sunday, on which occasion he either met or expected to meet the "idol of his adoration." (I need scarcely say he was more devoted to Belles Lettres and the loftier flights of literature, than to the material, exhausting pursuit of physic.) There is yet a more curious illustration of emotional power in this regard, in the fact commonly related by authors, that children at the breast suffer frequently from diarrhœa when the nurse gives way to violent passion of any kind.

The various forms the menstrual flux assumes is one of the strangest phenomena in the whole animal economy, and nothing more beautifully illustrates the close dependence of each part on the other and the harmonious compensating power inherent in the difierent organs throughout the entire system, than the fact that a hæmorrhagic discharge from the organs of generation, may in a measure alternate with a discharge of a similar or even different nature from the intestinal tract. It is by no means an uncommon occurrence that women, who have not their regular monthly menstruation, but who at the same time generally suffer from disagreeable sensations of heat, pain in the head, and a sense of general uncomfortableness, are suddenly relieved of all those symptoms by a tolerably sharp attack of diarrhœa, which is nature's recompense for the failure of the genital system to perform its functions. This is what I mean by *Metastatic Diarrhœa*, but this is by no means the only form of its development. You know abundantly how extremely common it is for individuals who are afflicted with many forms of cutaneous eruptions, to be troubled with diarrhœa when the eruption recedes. This is constantly observed in erysipelas and other kindred maladies, but herpes is that in which it is most common, to such an extent indeed is this the case that the herpetic eruption, during the course of the malady, may frequently alternate with an acute attack of diarrhœa, the one always appearing when the other disappears. So powerful is this disposition to metastasis in some constitutions, that diarrhœa will sometimes alternate with an ordinary sweat, the former appearing when the latter is checked by any means.

The fourth variety—Catarrhal diarrhœa, wherein the catarrh is secondary to the diarrhœa, is best explained by a consideration of what we often observe on the external surface of the body. We constantly notice how liable the cutis is to inflammation or excoriation when irritating secretions pass over it, as for instance, the upper lip in coryza, especially in the case of children ; or the parts surrounding the urino-genital organs or anus, when the discharges from either the bladder or intestines are allowed to remain in contact with them for any time. Now there are many conditions of the system in which the secretions from the stomach or other intestinal organs are so vicious, so far removed from their normal condition as to leave little room to doubt, that of themselves they are so repellant, so to speak, to the mucous membrane as to pass hurriedly over them, thus causing diarrhœa and consequently catarrh from irritation.

It is unnecessary to dwell at any length on the fifth variety—Diarrhœa induced by excessive tonicity of intestinal muscular fibre. Most practitioners have observed from time to time, a certain number of people, who, when the temperature of the surrounding atmosphere is lowered, suffer from diarrhœa to a greater or less extent. Nor is this reflex action as in the former instance of the cold douche, for reflex action is much quicker in its manifestations than in this variety to which I now refer. What is the object we seek in recommending cold water injections to patients troubled with habitual constipation? None other than this, in my opinion; to increase the tonicity of the intestinal muscular fibre, and so favour increased peristaltic action. Is it not in a somewhat similar manner that ulcers in the rectum and hæmorrhoids operate? Do not these morbid conditions first irritate the surrounding muscular fibres and thus cause them to contract, for we know that all muscular fibres contract on irritation, and is it not highly probable that this contraction extends by sympathy along the whole tract, when we consider the close sympathy existing between every part of the intestines, and thus leads to that harrassing diarrhœa almost invariably attendant on those maladies? I am inclined to the opinion that this excessive muscular tonicity is also the immediate cause of the diarrhœa so common among hysterical subjects.

The quantity or quality of food, the sixth recognized cause, is such a common source of diarrhœa, and so universally admitted as such, that by many it is deemed the most frequent of all the causes inducing this condition. The variety of peculiarities in this respect, is, to say the least of it, extremely strange; one individual eats fish of any kind and directly pays the penalty of his rashness by a sharp attack of diarrhœa; another

suffers after having eaten a particular kind only, as oysters, though he may with perfect impunity regale himself on any other kind, as crab, lobster, or mussels, while in a third, the favorite "pork and beans" which contributes so much not only to the bone and sinew, but even to the intellectual glory of the nation, are hastened on through the *primæe viæ* with no small inconvenience and discomfort. The number of articles of food that produce diarrhœa in different individuals is limited in extent only by the number of substances consumed, for cases are on record where individuals have suffered for years, and have suddenly lost all trace of diarrhœa on laying aside so simple and soothing a draught as tea, and even milk, the natural nutriment of childhood, has been compulsorily abandoned through the same cause. I need not dwell on the treatment of those varieties, if the cause be recognized the treatment will readily suggest itself.

I now enter on the seventh variety, which I consider as I said, entitled to a separate place, but in this as in all other matters of a kindred nature, I bow with the greatest possible respect to the decision of this Society, to whose intelligent consideration of all matters hitherto under discussion, I owe much very valuable information, and from whom in this matter also I anticipate the pleasure of much thoughtful discussion. The subject of Summer Cholera seems to me to be one of the most prolific sources of theoretical display, one of the widest regions for speculative pathology in the whole range of practical medicine, and hence it is with considerable reluctance I add another theory of its etiology to those already recorded, which are truly legion. It would be a barren expenditure of time and patience to enter on this long catalogue in any detail, and I shall consequently confine myself to the one theory that seems to have by far the greatest number of advocates at the present time. I allude to the opinion of those who regard Fruit of all kinds as the commonest source of diarrhœa in summer. I may first observe that there is no *rationale*, pathological or physiological accompanying this dogma, as far as I know, and I cannot help thinking that the mere coincidence of fruit being abundant whilst diarrhœa prevails in Summer, has to some extent misled the propounders of this doctrine.

1. If fruit were really *per se* the cause of diarrhœa, we should naturally find that in seasons when fruit most abounds, diarrhœa also becomes most prevalent, but this is evidently not the fact, as was first pointed out during the last century by Zimmerman, the well-known author of "Solitude," and since observed by several distinguished authorities.

2. It would be equally clear that in countries where fruit most abounded, Summer Cholera should, *cæteris paribus*, also most prevail; but I think we need not go far out of our way to be able to point out how untenable this proposition is. There is not, to my knowledge, a region of the globe that produces fruit in greater abundance and variety than California, while its summer weather is not materially different from most other regions of the same latitude, yet I think most of you gentlemen, who have practiced elsewhere, will admit that diarrhœa is not at any season unusually troublesome here; in fact, if I must trust my own brief experience at all in the matter, I should say it is a much lighter scourge of any portion of the population in this town, than in any other of similar latitude known to to us. But while I consider that Fruit of itself is not the common source of diarrhœa in Summer, I do not for one moment wish to be understood as asserting that fruit in *any condition* is not *one* of the causes. On the contrary, I believe fruit in certain conditions is a tolerably frequent cause of this malady, for it is beyond question that decomposing fruit, like all other decomposing articles of food, acts as a poisonous irritant in the intestinal tract, and it needs very little observation of the habits of the poorer classes, to notice what a vast quantity of fruit, in a half decomposed state, is consumed by them, more especially in places where fruit is scarce. Now, rejecting as I do, the idea that fruit is the general cause of Summer Cholera, what should we substitute in place of fruit, as producing it? Nothing more or less, I am inclined to think, than an undue elevation of atmospheric temperature; and I am inclined to regard the affection in question as merely a modification, in a milder degree, of Insolation or Sunstroke, in as much as both arise directly from the same cause.

In order to explain the progress of the morbid condition, it is necessary to consider the peculiarity of the circulation in the abdominal organs. We have, in the first place, the circulation through the mesenteric arteries, branching into the capillary system on the intestinal walls, which unite again into the portal venous system, which has again its capillary circulation in the substance of the liver, so that the arterial blood, which has entered the mesenteric arteries, courses through two totally different systems of capillaries before its return to the vena cava, by the hepatic vein. Secondly, we have the circulation of the hepatic artery and its capillary branches, coursing through the liver, and ultimately returning through the hepatic vein also. Now, I think it is highly probable that if by any means we produce congestion in the ultimate capillaries of the villous coats of the intestine,

we shall be able to produce diarrhœa from exudation alone. For some time I have considered that most irritants and drastic purgatives act in this way, and we have a further illustration of the same, in the action of some diuretics on the kidneys, for many of them act merely by retarding the circulation, so producing capillary congestion in the organ, and thus diuresis from exudation. The next step we should bear in mind, is the fact that heat invariably causes involuntary muscular fibre to expand, as may be conveniently observed in the familiar example of the action of heat on the scrotum. Consequently it is a legitimate induction that increased atmospheric temperature, continued for a definite period, shall by increasing the blood temperature directly through the pulmonary capillaries, increase the calibre of all the blood-vessels, more especially the smaller arteries. Now it is quite manifest that when the smaller arteries are increased in calibre they must necessarily exercise pressure to a greater or less extent on surrounding parts. Here then, we have, with undue elevation of temperature in the first place, the branches of the hepatic artery expanded, so causing more or less obstruction to the portal circulation; and secondly, we have the smaller branches of the mesenteric arteries expanded and causing more or less obstruction in what I may call the villous circulation. It is quite clear that a continuation of both causes will produce very extensive congestion of the intestinal capillary circulation, and so lead ultimately to diarrhœa.

But it will be urged in objection, that if the portal circulation be materially interrupted, we should find fluid in the peritoneal cavity. To this I would reply that we frequently have very extensive hepatic congestion without peritoneal exudation, and in point of fact, that much greater obstruction to the hepatic circulation than that which arises in the condition under consideration, is necessary to produce ascites. It will also be urged that the pulmonary circulation is somewhat similarly circumstanced, for we have in the lungs two different capillary systems, totally distinct from one another, and if the reasoning applied to the abdominal organs were correct, we should also inevitably have congestion of the lungs and ultimately pneumonia. My reply is that in Summer Cholera, pneumonia is by no means uncommon, and in those cases which cannot be attributed to vicious food or other reasonable cause, more or less pulmonary congestion is invariably present. I need not dwell on the indications for treatment; mild purgatives and cooling draughts instantly suggest themselves, and after an uncommonly large experience of the former, I can speak in terms of unqualified approval; for, though as far as I know, this *rationale* of the pathogeny of "summer cholera" has never before been advanced, yet in the institution to which I had the honor to belong to which I may observe in passing, must also be given the credit of having established what is known as the "castor-oil treatment" in Asiatic Cholera—we found nothing yield more favorable results in the vast majority of cases than castor-oil in mixture with mucilage and chloric ether. I have never tried cooling draughts, but mean to do so at the earliest suitable opportunity.

NOTE.—The Division of Diarrhœa is mainly taken from Trousseau's "Clinique Medicale." To my friend Dr. Whitney's remarks at the Society, I am indebted for several of the most valuable suggestions in the paper as it now stands. C. F. B.

GASTROTOMY—REMOVAL OF A LARGE MASS OF FIBROIDS WITH THE ENTIRE UTERUS—DEATH.

By JOHN SCOTT, M. D., F. R. C. S., Ireland, Surgeon to the California State Woman's Hospital.

Madame F——, born in France, æt., 41, admitted into the Woman's Hospital, 22d of March, 1870.

History. Married 20 years, never pregnant; health tolerably good up to 1860, when she had pain and slight enlargement of left ovarian region. Slipped and fell in 1861, since which time the tumor has steadily increased in size and has been attended by constant pain in the sacral and lumbar regions. Three years ago had hemorrhage at the catamenial period for a month, since that time almost complete suppression of the discharge. I first saw the patient with Dr. d'Hierry at San Jose, and by his advice she entered the Woman's Hospital.

On examination I found the abdomen irregularly enlarged by a hard double tumor, extending up as high as the spleen on the left side and below occupying the entire hypogastrium and filling the right iliac cavity; surface irregular, lobulated, only slightly movable and very tender to the touch.

The uterus was high up, with the cervix on a level with the pubis and pressed firmly against it by the tumor, which extended deep into the pelvis and interfered most materially with the passage of the urine and fœces. With considerable difficulty the sound was passed and went straight up to a depth of 4½ inches. Sleep was prevented by the constant pain, pulse weak and frequent, febrile exacerbations. Considering surgical interference out of the question, I thought it possible to lift the tumor into the abdominal cavity and thus relieve the pelvic organs from pressure. For this purpose, the patient's bowels having been emptied, she was placed deeply under the influence of a mixture of chloroform and ether, and steady pressure applied by two fingers in the rectum; but the attachments were so firm that it was found impossible to elevate it more than two inches. I afterwards explained to the pa-

tient's sister that I could do nothing more, except to remove the tumors by gastrotomy, which offered such a feeble chance of life, that I could not recommend it. The husband was sent for from Nevada, and on his arrival, an urgent request was made by him, the patient, and her sister, that I would take the tumor out, the patient adding that if I declined doing so she would end her sufferings by a dose of poison. In consultation with Drs. Burgess and Schuh, my able colleagues in the Hospital, I resolved on acceding to the request, stating at the same time that I believed the result would be fatal. On the 13th inst., the patient was put under the influence of chloroform and ether—1 to 3—and in the presence of Professor Byford of Chicago, Dr. d'Hierry of San Jose, and Drs. Burgess, Lane, Schuh, McNutt, Davies, Andrei and Buckley of San Francisco, I operated. Having opened the abdomen with a scalpel, I extended the incision with the scissors above to the umbilicus and down to the pubis, when the uterus was found behind the line of incision close to the abdominal wall and reaching nearly to the umbilicus. On each side it merged into and was continuous with a mass of fibroids, consisting of two large and a number of smaller tumors, with extensive attachments on either side, but especially the left, and covered by an imperfect capsule. With considerable difficulty, I separated the surrounding adhesions with the hand and then dragged the entire mass, uterus and all, forward, the only hemorrhage consisting of venous blood effused by the rupture of the adhesions. As it was necessary to remove the entire uterus, I passed a needle carrying a very thick silk ligature from before backwards, and from behind forward round the cervix, low down, and tied it firmly; I then passed the needle to the left of the cervix, and with the ligature tied the entire left appendages outside the tumor, and repeated the same manœuvre on the right side. With the scalpel I then cut across the cervix and divided the appendages on each side, between the tumors and the ligatures, and thus turned out the entire mass from the cavity. The complete removal occupied just thirty minutes, and the ligatures having been cut close off not a drop of blood followed the operation, nor was there any subsequent bleeding. The cavity was then sponged out with a solution of carbolic acid in water —1 to 40—and the abdominal incision united by six deep and five superficial sutures. Professor Lister having demonstrated the safety with which carbolized silk ligatures can be left in the cavity of a wound, I had taken the precaution to keep them for twelve hours previously in carbolic acid with a little spirit. There was great depression of the vital powers during and after the operation (she had well marked subsultus during the administration of the anæsthetic) and reaction was very slow in taking place. The pulse could not be felt at the wrist, the heart's action was feeble, 140 in the minute, and just thirteen hours after the operation she died from exhaustion. A post-mortem examination was made next morning, when nothing but a moderate amount of serous effusion was perceptible. No hemorrhage had taken place and no clots were visible.

The uterus and tumors weighed 3 lbs. 8 oz., the cavity of the former being encroached on in all directions by tumors in all stages of development, one of which was perfectly defined as an intramural growth. The uterine tissue extended on each side into two large and one small tumor, which latter consisted of a mass of smaller ones.

Remarks. The statistics of the operation, showing, as they do, only one recovery in four, are certainly not encouraging, and it is confessedly one of the most formidable in surgery. I fully anticipated the probability of finding the uterus so involved as to necessitate its entire removal, and as I had never witnessed the operation, I confess to having regarded with dread the occurrence of the formidable hemorrhage usually noted as occurring in connection with it, nor could I find anywhere anything like a succinct description of the various steps of an operation which is only mentioned by systematic writers for the purpose of condemning it. The procedure I adopted has at least the merit of simplicity; and as it must be an object of great importance to spare the patient the shock of a lengthened operation, the celerity with which it was performed was remarkable.

The difficulty of arresting a formidable hemorrhage deep down in the pelvic cavity, and the embarrassment it must cause to the operator, are evident to all; but the ligatures, placed as above described, so effectually cut off the entire vascular supply as to obviate the danger completely, and being so completely carbolized there was no reason to apprehend that their continued presence in the cavity would interfere with the progress of the case. No case more unpromising for operation could well have been selected, for the long continued existence of the disease had brought the patient's vital powers to the lowest ebb, and this was particularly evident by the fact that during a preliminary examination, and before the operation, the careful administration of anæsthetics had nearly proved fatal. I have noticed this element of danger in all patients suffering from uterine fibroids and there is, I think, no doubt that the "fibroid diathesis" is indicative of such general de-

generation of the tissues as seriously adds to the risk attendant on their removal by excision. It is therefore a wise rule not to interfere with such extra-mural growths so long as they are stationary of the surrounding organs. When, however, their growth is progressive and the health is beginning to suffer materially from their presence, I believe, notwithstanding all the dangers of removal, that it is the surgeon's duty to give the patient that chance of life which only an operation can afford, and without which life must inevitably fall a sacrifice.

To operate with a reasonable chance of success, it is, however, essential that the removal should be effected before extensive adhesions have taken place, while the tumor is mobile and before the vital powers are seriously impaired. Under these circumstances—and especially if demanded by the patient after a frank explanation of the attendant risks—I believe the operation will eventually take a legitimate place in surgery and be the means of restoring lives which must otherwise be lost by the progress of the disease.

SUPPOSED PREGNANCY—THE RESULT OF A DEPOSIT OF FAT IN THE OMENTUM AND ABDOMINAL WALLS.

By H. A. DuBois M. D., San Rafael.

February 3d I was sent for to see Mrs. A——, æt 43. I found her well developed, inclined to embonpoint. She supposed herself pregnant, stating her reasons as follows:

She had failed to menstruate for several months, her abdomen had steadily increased in size, and lastly she had felt the child move, not once or twice, but she said it was constantly moving. She informed me that she had been told that she was not pregnant by my partner, Dr. Taliaferro, but that as she felt the "child's movements," she desired that I should examine her also, as if she was not with child, there was something alive in her she was sure. Placing her on the back I percussed the abdomen, but found but moderate dullness, not the flatness of pregnancy. Auscultation did not enable me to hear the movements of the fœtal heart. The breasts, though well developed, yet showed none of the characteristics of pregnancy. On introducing my finger up to the os uteri, I found the os moderately open, the cervix long and conically shaped, not shortened and flattened. Ballottement gave no sensation to the finger of the descent of an embryo—I told her that she was not pregnant. Bimanual manipulation showed an increase of fat in the abdominal walls, but no tumor could be felt, much less marked out by the fingers. I gave her my opinion that she had no tumors in or about the uterus, and that the symptoms which she had detailed to me were the indications only that she had reached the "change of life."

I left her after prescribing potassii bromidi in 3ss doses every night and saline aperients, promising to make a formal examination if these did not give her relief. February 27th I was sent for again. She said that she was convinced that I was mistaken, as she felt the movements still. Placing her again on her back I introduced the uterine sound a little over two inches into the uterus, and until the fundus of that organ was touched as indicated by firm pressure: placing my other hand on the abdomen I could feel with difficulty the uterus raised by the sound. I next introduced a catheter into the bladder and was enabled thereby to estimate the thickness of the abdominal walls, as well as to discover that the uterus was a little smaller than natural; and a finger introduced into the rectum showed that there was no abnormal growth posterior to it, I therefore reiterated my previous opinion, adding thereto the statement that the walls of the abdomen were thick with fat and that the uterus was undergoing the atrophy natural to her period of life. Finding a little erosion of the os I had introduced, before taking my leave, two tufts of cotton wool well saturated with glycerine. March 3d Mrs. A. called upon me and asked if I had not told her that there were no tumors in her womb, and on my replying that I had, she unwrapped a bottle, and with an air of triumph presented it to me. On examination I found these pads, the using of which I had neglected to inform her of. She was much cast down when told of their true nature. I explained at length to her the symptoms sometimes produced by the deposit of fat in the abdominal walls, and over and among the intestines at the "change of life." She received this explanation with less distrust than previous ones, and a day or two since I was informed by her husband that she is convinced that I was right, as all movements have ceased for some time.

Since this case occurred I have read an interesting article in the February number of the *American Journal of Obstetrics*, by Dr. Geo. Pepper of Philadelphia on "adipose deposits in the omentum and abdominal walls of women, as a source of error in diagnosis." In each of the three cases which he details there was a sudden cessation of the catamenia or of some abnormal discharge, while in that above given there had been irregularity of the menses, if I remember rightly, for some time previous to their cessation. Mrs. A. was a most sensible woman and appreciated the proofs given her of her non-impregnated state, though the continued movements, which

occurred more at night than in the day time, had so acted on her mind that it was nearly impossible for her to believe that they were caused simply by a deposit of fat, or in fact by anything else than a living being of some kind. She repeatedly questioned me as to the possibility of worms causing these movements, and once asked me if it was not possible that a snake or other creature was alive in her stomach. These constant movements had so preyed on her spirits that she had become nervous, lost flesh, and almost a monomaniac on this subject. A second case has come under my notice differing from the first in some particulars. While Mrs. A. had had several children, Mrs. B. was childless—had been married late in life. She was about 42 or 43 years of age and her menses had ceased somewhat suddenly, and I cannot describe her case better than by making an extract from Dr. Sims' Clinical Notes on Uterine Surgery, which presents vividly this peculiar condition, and in fact is the only description that I have been able to find in the works at hand. Dr. Sims says (page 34) "a woman 40 years of age or more, becomes irregular. She thinks herself pregnant; by and by, she quickens; she begins to make baby clothes; she tells her friends of her interesting condition; she gradually grows larger; the time for confinement arrives; she is not quite as large as she was in previous pregnancies; nevertheless she cannot be mistaken for the frequent regular movements of the fœtus make it impossible for her to be otherwise than pregnant. At last she becomes alarmed at the procrastination of the labor, and sends for her physician, who finds the abdomen large, but the enlargement is due to an immense deposit of adipose tissue in its parietes. He passes his finger into the vagina, and discovers the uterus in an uninpregnated state; indeed it may be smaller than usual, for the cervix may be found rather atrophied, and the whole organ gradually undergoing the change that we always see when change of life occurs." Dr. Sims adds: "I have seen several cases of this false quickening, never in a woman under 38 or over 48. They had all borne children and all had a tendency to embonpoint. They were all women of culture, refinement and good common sense; and so strong in every case was the mental intal impression of the sense of quickening, that it was impossible to convince them that there was no pregnancy. Two of these ladies returned to me several times in the course of a year, and insisted that I must be mistaken. I now regret having dismissed them so peremptorily, as I thereby lost the opportunity of watching the progress and termination of this freak of change of life." I am inclined to think that these cases of false quickening from adipose deposit in the omentum and parietes of the abdomen are not so uncommon, and I shall be glad if the publication of this case shall draw forth others.

AUTOPSIES MADE BY J. LETTERMAN, M. D. CORONER OF SAN FRANCISCO.

Reported by EDWIN BENTLEY, Assistant Surgeon, U. S. Army.

Case 48. "Scorbutus."

P. M. U. White, male, Frenchman, sailor, aged eighteen (18) years.

Autopsy twenty-four (24) hours after death; no rigor mortis, œdema of the lower extremities; integuments of a light ash hue; dark colored abscesses, containing grumous blood in front of the right ear, and behind the right trocanter major; pupils widely dilated; bloody serum running from the nose; Sectio Cadaveris.

Head. Teeth loose and covered with sordes, gums of a leaden color, spongy, and expanding on the sides of the teeth; no bleeding from incisions in the scalp; membranes and brain cerengum; brain remarkably firm in consistence and of a milky whiteness.

Thorax. Lungs œdemic; no adhesions; ten (10) ounces of serum in each pleural cavity; two (2) ounces in the pericardium; cavities of the heart empty.

Abdomen. Two pints of effusion in the peritoneum; ecchymosed points over the surface of the liver, spleen and kidneys.

Remarks. Serous effusions in all the larger joints; no effusion of blood between the muscles; died on board a French bark the day before its arrival in port.

Case 48. "Poisoning. Strychnia."

M. E., White, female, American, aged thirty (30) years.

Autopsy eight hours after death; strong rigor mortis; no external marks of violence, symmetrical form; delicate physique; deep suggilations about the face, neck and right side; discharge of mucus from the nose; pupils dilated; Sectio Cadaveris.

Head. Scalp and pericranium congested; meningeal vessels injected; effusion of serum under the arachnoid, with deposit of flocculent lymph in it.

Thorax. Lungs congested, cicatrices an inch deep in the upper lobes; no adhesions; dark fluid blood in the cavities of the heart; valves healthy.

Abdomen. Liver fatty; spleen firm; pancreas normal; kidneys congested; bladder empty; intestines and peritoneum not inflamed; intense con-

gestion of the body and fundus of the uterus, about the 2d month of pregnancy; embryo floating in the amniotic fluid, surrounded by the ammon and chorian which are separated from the decidous membrane by purulent matter.

Remarks. Strychnia found in the stomach.

Case 49. "Poisoning. Aconitine."

G. M. H., White, male, American, lawyer, aged thirty-five (35) years.

Autopsy thirty hours after death; rigor mortis present; pupils widely dilated; suggilations about the face and neck; no external marks of violence, except a slight abrasion on the bridge of the nose, occasioned by falling in convulsions previous to death; had previously taken medicine, and had felt a queer sensation about the throat and had asked for a stomach pump to be used, feeling that he had taken poison; Sectio Cadaveris.

Head. Not opened.

Thorax. Lungs healthy; heart flaccid; cavities empty; valves healthy; blood fluid and of a dark color.

Abdomen. Liver congested; stomach and mucous membrane of the intestines inflamed; bladder empty.

Remarks. Discolored patches over the surface of the body.

Case 50. "Disease of the aortic valves."

M. G., White, female, Irish, housekeeper, aged sixty-three (63) years. Found dead in bed. Twelve (12) years ago a large tumor was removed from her face and neck; she took no ænesthetic, but bore the operation without evincing the least evidence of suffering or pain.

Autopsy about twelve (12) hours after death; fat, short, corpulent woman, weighing two hundred and forty (240) pounds; very strong rigor; pupils natural; mucous discharge from nose and mouth; Sectio Cadaveris.

Head. Not opened.

Thorax. Lungs inflated; no adhesions; aortic valves thickened, calcareous, roughened; ascending aorta atheromotous.

Abdomen. Stomach and intestines healthy; liver enlarged and fatty; spleen very soft and dark colored; coarse red kidneys; cysts in the cortical structure; uterus and appendages healthy, except a few mucous ulcers about the neck.

Case 51. "Drowning."

G. E. D., White, male, English, laborer, aged thirty-five (35) years.

Autopsy soon after the body was found; decomposition was advanced externally; face disfigured; Sectio Cadaveris.

Head. Not opened.

Thorax. Lungs healthy; inflated; no adhesions; pleural cavities full of water; chest distended; bubbles of air could be passed through the water by blowing in either bronchus; heart flaccid; ventricles contained gas.

Abdomen. Stomach nearly full of indigested food; no water in the stomach or abdomen; liver normal; spleen very soft; kidneys and intestines healthy.

Remarks. It has been observed, especially in drowned subjects, that even when changes have taken place, and decomposition so far advanced as to prevent the possibility of recognizing the features or mark of peculiarity pertaining to the surfaces, the deep muscles and organs within the cavities are found in a tolerable state of preservation, so that by careful dissections the structures may be distinctly recognized and their conditions satisfactorily made out.

Case 52. "Hæmoptysis."

J. M., White, male, Irish, laborer, aged thirty-seven (37) years.

History. This man had long been an invalid, and treated repeatedly at the City and County Hospital. He was found dead at the Presidio Gate.

Autopsy about twenty (20) hours after death; blood running from nose and mouth; pupils widely dilated; rigor mortis very strong; no œdema of the feet; very great emaciation; surfaces of a chlorotic hue; Sectio Cadaveris.

Head. Free hemorrhage from the usual incisions in the scalp; vessels of the brain engorged; brain soft; an ounce of serum in the dependent membranes.

Thorax. Strong pleuritic adhesions on both sides; a large vomica in the upper lobe of each lung; the lower lobes filled with miliary tubercles; heart atrophied; vessels injected on its surface; no lesion of the valves; ventricles contain dark clots.

Abdomen. Liver fatty; pancreas very hard and white; spleen red, small and firm; kidneys, stomach and intestines healthy; mesenteric glands were enlarged.

Case 53. "Poisoning. Alcohol."

D. T., White, male, American, laundresser, aged thirty-five (35) years.

History. Found dead in bed at his lodgings; reported to have been habitually intemperate.

Autopsy about thirty-six (36) hours after death; body exceedingly fetid, and decomposition rapidly

advancing; purging from nose and mouth; face swollen and of a bluish purple color; Sectio Cadaveris.

Head. Scalp bleeds freely from the usual incisions; sinuses engorged with blood; membranes have drops of blood over the surface; vessels injected; brain soft and flabby.

Thorax. Lungs and heart normal; slight old adhesions of the right pleura.

Abdomen. Liver very firm; sections of a light lead color; no bleeding from the incisions, but presenting a dry and withered appearance; gall bladder distended; spleen dark, pulpaceous; kidneys congested; stomach intensely inflamed; intestines healthy.

Remarks. The odor of spirits was not perceptible in either the brain or stomach. The condition of the organs in this case is believed to have been influenced by the suffocating steam in which he was required to remain while at his work; the large quantity of whisky which this man is reported to have drank, together with his condition when last seen, makes the result quite certain.

Case 54. "Chronic Alcoholism."

Unknown, white, male, Norwegian, proximate age forty (40) years.

Autopsy about twenty hours after death; eyes and mouth open; pupils dilated; schlerotic coat of the eye of a clouded, dark color; cadaveric rigor present; body muscular; no excess of adipose; abdomen retracted; sinex transverse distinctly marked along the recti muscles of the abdomen; Sectio Cadaveris.

Head. No hemorrhage from the usual scalp incisions; membranes pale; meningeal vessels anemic; brain very firm and white; white blood clot in the superior longitudinal sinus; two ounces of serum at the base of the brain.

Thorax. Lungs healthy; right pleural surfaces adherent; cavities of the heart full of blood-clots.

Abdomen. Liver very large and fatty; spleen large and soft; kidneys congested; bladder distended; mucous membrane of the stomach intensely inflamed; intestines healthy.

Remarks. In this case a manifest odor of alcohol could be detected in the brain, stomach and lungs.

Case 55. "Catarrhal Pyelitis."

Unknown, white, male, ———, German, proximate age fifty (50) years.

Autopsy ten hours after death; no external marks of violence; rigor not formed; slight emaciation; Sectio Cadaveris.

Head. Free hemorrhage from the scalp incisions; meningeal vessels engorged; cerebral vessels injected; brain firm; serum at the base of the cerebellum; little cysts in the choroid plexuses.

Thorax. Weak, ribbon-like adhesions of both lungs; no effusion; no tubercl es; heart healthy; larynx and trachea unobstructed.

Abdomen. Liver, pancreas and spleen healthy; mucous membrane of the stomach very pale; intestines free from any evidence of mortification; pus, and mucous mixed with the urine in the bladder; enlargement of the pelves of the kidneys with rough calcareous plates extending over the lining membrane; alternate dilations and contractions along the course of the uriters; mucous membrane of the bladder morbidly red; kidneys atrophied; surfaces granular; pyramids of a cartilaginous character.

Remarks. From an anatomical examination of the kidneys in this case it seems quite extraordinary that they retain the power, when so generally and completely disorganized, of performing their normal functions in the slightest degree.

Case 56. "Erysipelas of the scalp."

M. K., Male, white, Irish, vagrant, aged about thirty-five (35) years.

History. Died in the City Prison, where he had been taken in a fit of intoxication.

Autopsy thirty-six (36) hours after death; body in a good state of preservation; rigor mortis very strong; blood at the orifices of the nostrils; pupils slightly dilated; deep suggillations about the neck; robust physique; Sectio Cadaveris.

Head. Scalp congested; upper and posterior portions coriaceous; cellular tissue under the scalp infiltrated with serum, which mingled with blood ran freely from the incisions made to expose the skull; vessels of the dura-mater injected; brain firm, red and congested; two ounces of serum in the dependent membranes; shreds of lymph under the arachnoid, over the pons and medullar.

Thorax. No adhesions; grey hepatization of the right lung; left lung and heart in a normal condition.

Abdomen. Sections of the liver present the usual nutmeg appearance seen in commencing cirrhosis; spleen firm and red; pancreas and kidneys healthy; mucous membrane of the stomach inflamed; bladder distended with urine.

CORRESPONDENCE.

BOSTON, Mass., April 15th, 1870.

Editors California Medical Gazette:

There being a dearth of medical news I send you the following sketches of cases reported to the Observation Society:

Cerebral Disease.–Case reported by Dr. S. G. Webber, and specimens shown. Young man who lost hearing of left ear six years ago, subsequently had paralysis of left side, vertigo, severe pain in head—parietal and occipital; cold perspiration of face; impairment of vision of left eye, subsequent of right; left pupil dilated.

Autopsy—seventh and eighth nerves of left side could not be found; fifth implicated in disease; greenish purulent semi-fluid substance under pons varolii; small abcess in cerebellum; disease supposed to be glyoma—composed of small cells having a villous-like formation internally. The fifth, sixth, seventh and eighth nerves of the left side were implicated in the disease, and the ninth, tenth, eleventh, twelfth were stretched. The symptoms in this case were not so varied as would be expected from a lesion implicating so many of the cerebral nerves near their origin.

In connection with this case Dr. Williams spoke of the value of ophthalmological examination in such cases, and said he by this means diagnosed intra-cranial growths in several instances.

Bromide of Potass. Dr. J. F. Reynolds related the case of a small child to which 2 gr. of the bromide had been given three times a day for a month without his knowledge. The child was weak, depressed, irritable, with staggering gait; symptoms disappeared upon omission of bromide.

Convulsions.—Dr. F. B. Greenough reported a case of convulsions in a child caused by swallowing a large piece of pulp of orange. The convulsions lasted two (2) days; were very severe and accompanied by unconsciousness. On the third day a large piece of pulp of orange was passed from the rectum and convalescence was speedily established.

Diphtheria.—Dr. W. F. Munroe reported a case of diphtheria occurring in a lady six months pregnant, without any ill effects to the fœtus.

Placenta Prœvia.—Dr. J. Homans reported the case which he attended in connection with Dr. Page. There was but little hemorrhage either before or during labor, or subsequently. The placenta was separated throughout its entire extent and the child turned. The child was dead, the mother did well.

Embolism.–Dr. Treadwell related the case: Woman about 40 years of age, has suffered from valvular lesion of the heart for several years. About three weeks ago, while lying upon a sofa, experienced a sudden faintness and rolled off upon the floor. Upon taking her up, her left side was found paralyzed, the heart's action very much embarrassed, and the cutaneous circulatory system very much engorged. During the two succeeding days she could move the foot to a slight degree, subsequently, however, it became totally paralyzed. The tongue was thrown to the left when projected; the pupils were normal, the left being slightly dilated at times. She now appears to be recovering, having been able to move the left foot to a considerable extent during the past ten days. Case thought to be one of embolism.

J. B. T.

MEDICAL PHILOLOGY.

By H. RAGUET WIRTZ, M. D., Oregon.

The terms *typhus* and *typhoid*, which designate specific forms of fever, are also frequently applied to any low febrile condition. This creates confusion, and I would propose, in order to attain greater precision of language, as follows: Let the word *typhus* be applied to jail or spotted fever alone. Let the word *typhoid* be applied to enteric or dothenteritic fever alone; and to express the low condition of the system, resembling that found in the last stages of typhus and typhoid, let us use the adjective *typhic*. It is better than *typhous*, which sounds like typhus; and it is shorter than *typhoidal*.

Definition: *Typhic*—An adjective applied to that condition of things characteristic of the last stages of typhus and typhoid fevers, but observed also in other febrile complaints, and marked by a peculiar group of symptoms, as muttering delirium, picking at flocks, starting of the tendons, slipping down in bed, etc.

REPORTS OF SOCIETIES.

ACADEMY OF SCIENCES.

The regular semi-monthly meeting of this Society was held on the 18th ult., Dr. Blake in the Chair.

PRESENTATIONS TO THE CABINET.

Mr. Carlton presented the skull and jaw-bone of an Indian dug up near Colusa. Gregory Yale presented, from C. Scott, a fossil oyster from the coal formation on Soledad Creek, near San Diego. Prof. Bolander presented a valuable collection of American ferns, forwarded by Prof. Eaton, of Yale College, an eminent authority on ferns. Dr. Cooper announced the receipt of a large number of valuable scientific works, the publications of foreign societies, forwarded through the Smithsonian Institute.

ARCTIC EXPLORATION.

Dr. Blake read a communication from Capt. Hall, the Arctic explorer, asking the Academy to petition Congress in favor of an appropriation of $100,000 in aid of his proposed Expedition to the Open Polar Sea. After some discussion, a

motion that the Academy memorialize in favor of the appropriation was adopted.

OUR COAL FORMATION.

Prof. Whitney said Mr. Robert Brown, of Edinburgh, had made a statement that the coal of this State is inferior to that of British Columbia, and that we might expect to depend upon that province for our future coal supplies. Mr. Brown had also declared that the coal beds of British Columbia belonged to the true carboniferous formation. Prof. Whitney noticed these statements because they had gone the rounds of the press and might have some influence. They were not correct. It would be curious to find that a political line coincided with a geological division. The coal formation described by Mr. Brown was not later than the cretacean, and the coals of British Columbia were not superior to those found southward.

STATE BOUNDARY AND MOUNTAIN LAKES.

Prof. Whitney also made some remarks on the boundary line between California and Oregon. It has been correctly surveyed and established by order of the Secretary of the Interior, by a party under Maj. Daniel G. Major, who had correctly determined the intersection of the 42d parallel of latitude with the 120th parallel of longitude. Major's party were unable to find the monument erected by the party which had previously, by order of Nevada and California, established the boundary between those States. The line run by this party was about two miles to the eastward. It was probably accurate enough for the purpose of the State survey, which was mainly prosecuted to determine on which side of the boundary Honey Lake Valley was located; but it would not serve for an exact boundary. In connection with this subject, Prof. Whitney said that Goose Lake, adjoining the northeastern boundary, had materially increased its volume of late. It had formerly no outlet, but is now pouring a large volume of water into Pitt river, and some apprehensions are felt lest its flooding may do damage. All the lakes in that region have increased their volume within a few years, and are still rising. The subject was one worthy of special inquiry, and when the Geological Survey reached the region it would endeaver to collect accurate information concerning it.

EARTHQUAKE METER.

The subject of earthquake shocks was briefly discussed, and Prof. Whitney moved the appointment of a Committee to inquire as to the best instrument for recording such phenomena, and the proper place to fix it. He thought the Academy might make some very useful obseruations with a good instrument. Dr. Gibbons and Mr. Williams described several simple and inexpensive methods of recording earthquake shocks, but Prof. Whitney contended they were not exact enough for scientific purposes. His motion was finally adopted, and the Chair appointed Prof. Whitney, Dr. Gibbons, Prof. Davidson and Col. Williamson a Committee to carry out its object. Dr. Cooper made some interesting remarks in regard to the connection of earthquake phenomena with certain climatic zones, and the destruction of ancient cities in Asia.

AN IODINE SPRING.

Mr. Hanks stated that he was engaged in the analysis of some water obtained from a spring near this city, which contained so much iodine that, without condensing, it gave a strong reaction when the proper test was applied. A full statement of the analysis will be made to the Academy. Prof. Whitney referred to the elaborate and delicate processes of analysis now used in Europe, which sometimes consume months, and stated that analysis of California waters is very desirable.

After some desultory conversation the Academy adjourned.

CALIFORNIA PHARMACEUTICAL SOCIETY.

Report of the Twelfth Meeting, held Monday evening, April 11th, in the new rooms of the Society, No. 226 Sutter Street.

Meeting opened at 8 P. M., the President in the Chair. Minutes of previous meeting read and approved. Several gentleman were proposed as new members and elected according to the forms of the constitution.

The Secretary read various interesting letters received by him since the last meeting, particularly one from Messrs. Wilson & Co., Botanic Druggists of Boston, Mass. This firm donated a box of pressed herbs prepared by their own peculiar method, to the Society. The Secretary had received the bill of lading and hoped to be able to distribute them among the members by the next meeting.

Instructions were given to the Executive Committee, to provide for the purchase of a cabinet for minerals, etc. The Secretary stated that the Society had received a gift of a collection of two thousand (2,000) botanical specimens from Calaveras Co. These were gathered and presented by one of their members, Mr. T. J. Searle, who is at present in the Sandwich Islands.

The Secretary was directed to subscribe for various chemical and pharmaceutical journals, for the use of the Society. It was resolved to order various English, German and French periodicals as well as the standard American publications.

A letter was read from Mr. Falkenau asking to be excused from presenting his promised essay, on account of sickness. The excuse was accepted and hopes expressed that Mr. Falkenau would be able to present the same at the next or a future meeting.

Meeting adjourned at 10 P. M., until the second Monday in May.

JAMES G. STEELE,
Secretary.

MICROSCOPICAL SOCIETY.

A regular meeting of the San Francisco Microscopical Society was held April 25th. A letter was read from the American Microscopical Society, of New York, congratulating the new Society upon its organization. With the letter was presented some interesting sucustrine sedimentary deposit, containing an abundance of fresh water diatoms. The following names were proposed for resident membership, and unanimously elected: Thomas Price, A. H. Rapp, Melville Atwood and D. E. Josephi. Also the following corresponding members: Lionel S. Beale and Edward Forbes, London; J. W. Deems and Arthur M. Edwards, New York; Rev. E. R. Beadle, Philadelphia; J. Lawrence Smith, Louisville, Ky.; George Ford, Melbourne, Australia; J. J. Stevenson, West Virginia University; George J. Brush, New Haven, Conn. Many interesting objects were examined, and new slides presented. The Corresponding Secretary was instructed to open a correspondence with the various Microscopical Societies of the world, and to solicit from them exchange of objects and transactions. The Society then adjourned to meet again in four weeks.

BIBLIOGRAPHICAL NOTICES.

On the Physiological Action of Magnetism. By JOHN VAN ZANT, M. D., formerly Passed-Assistant Surgeon, U. S. Navy, and late Surgeon and Brevet Lieut.-Col. U. S. Army, San Francisco, Cal.

The above is the title of a pamphlet of some thirty pages, being a reprint from the *Journal of Psychological Medicine.* And in as much as the article has attracted so much attention in the east, having been read before the American Academy of Arts and Sciences, by Professor Horsford of Cambridge, and also before a medical society in New York, by Professor W. A. Hammond, we will endeavor to make a few extracts which will convey to our readers the author's ideas. He says:

"The object of this paper is, to make known some physico-physiological experiments demonstrating that the force emanating from a permanent magnet is capable of exercising an influence upon the functions of living beings."

He first states briefly some theoretical considerations which he thinks would render the facts which he announces probable in the absence of his confirmatory evidence, then refers to the fact that it is not at present believed that magnetism can produce any appreciable functional effect in a living organism, and that our standard works on sciences ignore the existence of any such fact.

Then follows a detailed account of the experiments upon vegetables and animals, which the author considers demonstrates beyond a doubt, the physiological action of magnetism. From the experiments we copy the following, viz:

EXPERIMENTS UPON VEGETABLES.

1. "I took for experiment three small flourishing tulips (*Tulipa gesneriana*) in full bloom, flowers red, growing in the same pot within four inches of each other. These plants, which I shall designate as A, B, C, were about equally vigorous, almost exactly of the same size, and were watered and kept in a light room at a genial temperature. If there was any advantage in vigor, it was in favor of A.. By means of a steel-bar magnet, capable of lifting with one pole about an ounce of iron, I applied *Boreal* (+) magnetism—the southward end—to tulip A, drawing the pole slowly from the surface of the soil in the pot to the top of the plant along the stalk and larger leaves, and repeating this manœuvre for about three minutes. I then made a similar movement over tulip B, but substituted *Austral* (-) magnetism—the northward end—for that first used. Tulip C was left untouched. Almost immediately there was a contraction or shrivelling of the *petals* visible in both of the plants touched, but especially in A. Soon, however, the contraction disappeared from B, while in A it continued unabated. About twelve hours afterward, I placed a small straight magnet, some four inches long by one sixth of an inch in diameter, so that its + pole resting against the scape of A, and its - pole against that of B, should keep up the same kind of magnetic action as first applied; and the instrument was left in this situation for thirty-six hours.

At the end of that time the flower of A was very much withered and evidently dying, the leaves of the plant were curled, the healthy green color was faded, and the whole had a declining aspect. The flower and leaves of B, on the contrary, looked equally as fresh and of as good color as those of C, which were untouched by the magnet; and even, I think, the flower was more expanded and the red of a deeper shade. After about eighty hours from the beginning of the experiment the flower of A, was quite dried up, while that of B, though more shrivelled than C, was far less withered than A. The green leaves of B appeared just as healthy as those of C, but the leaves of A were more than ever curled and pale."

2. (I extract the account of this experiment from my notebook, premising that the magnet employed was a good one, formed of a cylindrical steel rod, eleven inches long by one-fourth of an inch in diameter, with a wooden handle attached to the middle for convenience in manipulating.) "I killed another small spider to-day, by the gentle application of bar magnet. Quick touches with alternate poles on back seemed to affect it soonest. It was one hour from beginning of experiment till it died, though frequently I would wait six to ten minutes, after several rapid touches, and while it was lying motionless, to see whether or not it was dead. Then, by watching it carefully, with the aid of a large lens, I would see at first a tremulous motion of the extremity of one or more of its legs, as it lay upon its back with legs extended and directed upward. Then, in a few minutes, a sudden motion of perhaps one limb, and then, after another moment of rest, a spasmodic movement of all the body, and it would throw itself again on its feet and rapidly run off as if nothing had happened. As the experiment progressed, the periods of sleep or stupor increased in length, and the spasmodic movements on awakening became less and less powerful, until toward the last it would have to make several attempts to turn over on iss feet; and, sometimes after it had turned over and made a step or two, it would quickly itself again on its back and lie motionless for several minutes. When it would revive from one of its attacks of stupor and run off, a touch, or two of the end of the magnet would instantly put it again asleep on its back.

"The northward (-) pole seemed to have the most lasting effect upon it; though at the very moment of application, the other pole, the southward (+), had the most stupefying influence; but from this latter it quickly recovered. I also think I observed that the application of the + pole to the back had the same effect as the — pole to the underneath part of its body, and stupefied it most. The contrary also seemed to be true, i. e., the — pole to back, or the + pole to under part of body, affected it less permanently, but more quickly during the application.

"The way that seemed to stupefy it most of all was, after it it went to sleep on its back, gently and quickly to roll it over with the — pole, thus touching its back and belly with the same pole in rapid succession. Finally, at the end of about one hour, it ceased to move at all, and did not again recover; though, before the last application of the — pole, it lay fully ten minutes without motion, and then so far revived as to be able to turn over and walk slowly off. In these touches not the least mechanical injury was done the spider; and I noticed that, toward the last, I could stop it when running off without actually bringing the magnet in contact with its body. Before employing the magnet in this experiment, I tried a brass rod of about the same size as the magnet, touching the spider in the same way; but this seemed to produce no effect upon it; it ran off just the same as before receiving the touches, and would pass over the end of the rod with impunily. I also renewed the trials with the brass rod at the end of about half an hour from beginning with the magnet, and when the spider was considerably enfeebled by the magnetism, but with the same negative effect as at first. The spider was a web-spinner, with a body about one-fourth of an inch long, and legs about half an inch; color light brown, with a crescentic black mark on each side of thorax, and a lozenge-shaped mark in the centre of top of the abdominal section. This experiment was very conclusive."

We have not space to give the table exhibiting the effects of *Boreal* (+) and of *Austral* (—) magnetism applied to the various parts of the human body. The method however, adopted to determine the actual condition of any accessible organ or part of the body, was as follows:

"I first ascertained, by numerous trials on the same person and on different ones, that a given pole of a magnet placed in contact a short time with a given part or organ would give rise to a set of symptoms of a definite character, varying apparently

only in intensity. I then found some other part which, when tested by the same pole in the same way, produced a similar set of general symptoms. This showed that the two parts submitted to experiment were in the same electrical or polar state, but did not indicate what that state was in reference to the magnetic poles. I then discovered that, by making to the same part, previously tested by the magnet, an pplication, first, of — electricity from excited lac, and, after a sufficient lapse of time for the system to regain its normal condition, an application of + electricity from excited glass, different sets of symptoms were produced, like those from opposite poles of a magnet; this showed the relation between the action of magnetism and electricity on the body, but still gave no information as to the positive or negative state of the part operated upon. The question was finally decided by carefully observing that it is possible, in some cases, to determine distinctly the kind of action that one part is capable of inducing in another by contact. I thus found after many experiments two distinct parts that took on the same action, i. e., produced the same general symptoms in the whole body, when influenced by the southward pole of a magnet, or by the positive electricity of glass, or by their mutual reaction. These organs were then clearly +; because things that resemble the same thing must resemble each other.

Acknowledging, now, that this subtile power exerts an influence on the *animate* world, as well as the *inanimate*, the subject looms up into great magnitude and importance. When we reflect that the globe on which we live is an immense magnet—that the oxygen we breathe is magnetic—that every mass of iron is more or less magnetized by the earth's induction—that the motion of all metallic bodies across the lines of natural magnetic force produces, if not magnetism, at least its equivalent in action—and, finally, as the researches of modern philosophers have shown, that every material substance and even the so-called imponderable agents are acted upon attractively, repulsively, or otherwise, by the magnetic force—a new element presents itself for our consideration when seeking the solution of numberless obscure vital phenomena. Especially must the relation of this occult, all-pervading, all-penetrating force to the causation and cure of disease prove to physicians an attractive and fruitful study.

Bellevue and Charity Hospital Reports—1870. New York: Appleton & Company. San Francisco: A. Roman & Co. pp. 415.

This book consists of a history of the hospital, and fourteen very valuable and interesting essays, all of which are on important subjects.

The success which attended Guy's and other London Hospital reports has no doubt encouraged the attempt on this side of the Atlantic. The reports before us, though not equal in mechanism to Guy's, are we think, not less important, as a contribution to the profession; and should the subsequent reports be equally as interesting and valuable, the "Bellevue and Charity Hospital Reports" will be as valuable a series to a medical library as are Guy's.

Silk and Tea Culture, and other Asiatic Industries adapted to the soil and climate of California. By T. A. Kendo. San Francisco: A. Roman & Co. Publishers.

It is thought by persons understanding the subject, that the climate and soil of our State is especially adapted to the culture of the tea plant and other staples of Japan. Japanese have already procured lands, hoping to make the culture of their leading staples a profitable and extensive business. Herr Schnell, a German, who is well versed in Japanese productions, has also purchased lands and commenced the culture of tea.

The author says in his preface:

"As there is, at this time, much attention being paid to the cultivation in this State of many trees, shrubs and other vegetable productions heretofore only grown extensively in Japan and the Orient, I have thought it might be of service to those about to engage in this laudable enterprise to know something about the manner in which these productions are cultivated in Asiatic countries."

We agree with him; the work is *apropos*, and will no doubt be of great service to many who are anxious to engage in new enterprises.

DISTINGUISHED ENGLISH AND AMERICAN SURGEONS.

Cooper and Cline of London were graceful and accomplished operators; while Abernethy and Hunter, less showy in their operations, excelled in their pathology and knowledge of disease. Abernethy showed the great importance of the principles of surgery, while Cooper and Cline showed how much elegance there was in a nice operation.

There was the same difference between Mott and Stevens of New York. The former excelled in the nicety of his operations, while the latter was superior in pathology and practical knowledge. It was a common remark thirty years ago, that a patient should consult Stevens in regard to the propriety of an operation, and if he advised it, have Dr. Mott perform it.—*Medical Record.*

SIMPLE METHOD OF DETECTING SUGAR IN THE URINE.

Take an old cotton handkerchief, allow a drop of urine to fall upon it, which immediately spreads out. Hold this over some hot coals, and a very distinct chestnut colored spot is produced, darker at the circumference than at the center, and so much the darker as the amount of sugar is greater, with the odor of burnt sugar also strongly perceptible.—*Un. Medical—Chc. Med. Times.—The Medical Bulletin.*

THE ORIGIN OF SYPHILIS IN EUROPE.

M. Auzais Turenne has lately addressed the Academy of Medicine in favor of the Transatlantic origin of syphilis. The talented syphilographer bases his views on three orders of proofs:—1st. (Historical) the writings of Oviedo, Thevet, Roderic Dias, showing the importation of syphilis, and its progress through Spain, Italy and France. 2d. (Horological) to wit, the generalization and the benignity of the disease when first observed in the West Indies, its progress through Europe, insidious at first, then speedy and terrible, and now generally waning away. 3d. (Philological) to wit, all the appellations of the disease and its symptoms, which have been found in the Caribbean dictionary and in the vocabulary of the Indians, with the exception of the names of those diseases which we have exported to America Having thus advocated this theory of the importation of syphilis from the far West, M. Auzais Turenne winds up with the following practical conclusion: Syphilis has come from America. We must renounce as a general method, its traditional treatment by mercury; the ill must become its own remedy and its own preservative.—*Lancet.*

California Medical Gazette.

SAN FRANCISCO, MAY, 1870.

☞ *All Letters and Communications to be addressed to the* "EDITORS CALIFORNIA MEDICAL GAZETTE, *care of A. Roman & Co., San Francisco.*"

CHLOROFORM VERSUS ETHER.

So many deaths from chloroform have lately been reported, that the question: Have we any safer anæsthetic? becomes more and more important both to the profession and the public. Boston unhesitatingly says yes, *Ether*, and as our medical brethren of Boston are honorable men, we might ask why is the use of ether confined almost exclusively to Boston. The fact is, that the denunciations of chloroform and the laudatory reports of ether, by Bostonians, are considered by the profession generally, as unfair and unreliable. Nor is ether used exclusively even in Boston. Dr. Storer in the *Journal of the Gynæcological Society* of Boston, for April, is decidedly in favor of chloroform in obstetric practice. He also gives it as his opinion that the mixture of chloroform and ether, equal parts, is more dangerous than chloroform alone, and goes on to state that he "was not sure but that he should entirely discard the use of ether, as has been done in almost every place in the world save Boston. There might be, there undoubtedly was, a slightly greater risk of life, when we came to examine into tables of thousands of cases, but in comparison with the many other risks, as of increased retching, etc., etc., greater with ether and very positive oftentimes in their disastrous results, he thought the balance in favor of chloroform."

He instances two cases of death from ether, and promises that in a future number, he will give "an incontrovertible statement of deaths from sulphuric ether * * so detailed and presented as to warrant the assertion that, in proportion to the number of instances of their respective use in the world * * * the inhalation of sulphuric ether for anæsthetic purposes is in reality more deadly and unsafe than that of chloroform."

We believe, however, that it will be found that the danger generally lies in the physiological condition of the patient at the time of administration of the anæsthesia, and not in the particular anæsthetic used, and that fear, the dread of the operation or its consequences, is the agent, above all others, which produces the physiological condition most conducive to death from anæsthetics. When the patient exhibits no fear for the operation, I have none in administering chloroform. When the patient exhibits great fear, I administer the chloroform slowly and cautiously, believing that the shock of a full breath of the undiluted vapor of chloroform to a very nervous patient, may and often does produce death, while it would be quite harmless to the same individual, in the absence of the nervous condition which is due to the fear of the operation. We do not wish to be understood to say that there are not pathological conditions in which the use of chloroform or ether would be very dangerous; but, that the majority of deaths from anæsthesia are due to physiological conditions, is evident from the history of the reported cases. For instance, many of the reported cases of death from chloroform, have occurred when the anæsthesia was administered for the extraction of teeth, the subjects being generally females, while few if any accidents, when the anæsthesia is administered in obstetrics. Yet there is no comparison between the suffering and exhaustion accompanying the two conditions, on the other hand the fear and nervous excitement is much greater when a tooth is to be extracted than at the approach of labor.

MEDICAL EDUCATION.

Professor Gross has recently delivered himself of a good wholesome fact, but which is not by any means flattery to the profession. He stated before a large class of students in Philadelphia, that medcal education in America, had made no advancement for the past fifty years. That neither the term of study nor the course of lectures, had been lengthened, although it is acknowledged on all sides that a student cannot acquire a proficient knowledge of his profession, under the present requirements of our medical colleges. He calls upon the University of Pennsylvania to join the Jefferson Medical College, in lengthening their term of study.

We had hoped that before this, the American Medical Association would have taken some practical step in this direction, made up as it is so largely of professors and medical teachers, but are beginning to think that the large numbers of teachers represented, is the cause of delay. Like Professor Gross, they cannot afford to be virtuous unless others are.

DR. J. H. McQUILLEN, editor of the Dental Cosmos, in an editorial on the "preservation of wisdom teeth, says: "There is a general impression on the part of the community, shared to a great extent by the dental profession, that the wis-

dom teeth are of such little value that the best thing that can be expected of them is to serve a few years and then be extracted. That this is their usual fate cannot be denied. That such *should* be the invariable result is, however, a matter of question.

The fatality attendant upon these teeth is due to causes which, if promptly removed, would insure the preservation of a large number for many years of service. This is said advisedly, and based upon a personal experience, in which a large number of such teeth were promptly attended to, and are now useful organs."

He believes that the slowness of their eruption is the great cause of their decay, and recommends that the flap of gum which sometimes partially covers them should be removed, in order that the tooth-brush may remove any substance which the overhanging gum would retain in contact with the tooth.

DEATH FROM CHLOROFORM.

Sir James Y. Simpson, in the *British Medical Journal*, reports a case of death from chloroform. The patient was a young married woman, 22 years of age, the subject of an ovarian tumor. Says Sir James:

"With the view of allowing Dr. Wilson to give full assistance to Mr. Brotherston at the operation, I chloroformed the patient. In doing so, I placed a single layer of towel over the nose and mouth, leaving the eyes exposed; and dropped the chloroform upon the towel. When Mr. Brotherston made his first cutaneous incision, the patient moved so much that he stopped for a brief time, till I put the patient more deeply under the effects of the anæsthetic. The tumor was rapidly reached, and was attempted to be diminished in size by tapping; but only a comparatively small quantity of fluid escaped. Mr. Brotherston then extended the opening upward for an inch or more above the umbilicus, and was introducing and using his hand with the view of turning out the ovarian mass, when the patient vomited suddenly and profusely. Immediately the eyes opened; the pupils were preternaturally dilated; the face looked pallid; and the respiration which had never been affected by the chloroform so as to have the least noise or stertor in it, seemed arrested. Instantly artificial respiration was set on foot, and the tongue was pulled forward. Deep spontaneous respiration then occurred several times in succession, and I deemed at the moment that the patient was out of danger; but a second collapse occurred, which terminated in death, all means of resuscitation proving unavailing.

A "New York State Hospital for Diseases of the Nervous System," has recently been incorporated, having for its objects the gratuitous treatment of "indigent persons (without regard to nationality or creed), who may be affected with acute or chronic diseases of the nervous system, especially epilepsy and paralysis, but excluding actual insanity;" and clinical instruction to physicians and students in such branches of medicine. The medical officers are:

Physician-in-Chief, Dr. Wm. A. Hammond; Assistant Physician, Dr. R. A. Vance; Consulting Physicians, Dr. Austin Flint, Dr. Geo. T. Elliot; Consulting Surgeons, Dr. James R. Wood, Dr. Lewis A. Sayre. A house physician and four clinical assistants are to be appointed after passing a satisfactory examination.

ALAMEDA COUNTY MEDICAL ASSOCIATION.

The Oakland Medical Society was reorganized at its last meeting, and made to include the whole county, to be called as above. Thus far the Society has been harmonious and prosperous. The papers read before the Society, some of which we have already had the pleasure of presenting to our readers, have been instructing and interesting. The Society though small as to numbers, will be likely to be continued. Its founders have started it squarely on the basis of the American Medical Association.

BROMIDE OF POTASSIUM IN DIABETES.

Dr. Austin Flint has published in the *American Practitioner*, three cases of diabetes, which he treated with bromide of potassium. The results were quite favorable. The quantity of urine was reduced in each case, as was also the specific gravity.

☞*Readers of the* California Medical Gazette *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received and acknowledged under "Communications received."*

ASSOCIATION OF MEDICAL PRACTITIONERS OF THE DEPARTMENT OF THE SEINE.

This Association held its annual meeting last week. The report stated that, during 1869, 26,450 francs (£1058) had been distributed among seven members, 20 widows or children of members, and 25 persons not belonging to the Association. Legacies amounting to 20,540 francs, (including one of 18,000 francs) were announced; also donations varying from one of 1500 francs (from M. Nélaton) to 20 francs—the total amount of donations being over 9000 francs.—*British Med. Journ.*

HYDRATE OF CHLORAL.

Dr. J. W. Ogle has been giving a trial to this new remedy in several cases. It has proved most useful and satisfactory in its action as a hypnotic in small doses—viz., doses varying from five to ten grains. In a slight attack of delirium tremens, twenty grains acted very sufficiently and well in procuring sleep. In one case only did any unpleasantness attend its administration, and that was when peculiar sensations about the head were complained of by a woman suffering from chronic peritonitis, who took five grains. On the following night, four grains were given along with a few drops of chloric ether, and no such unpleasant results followed.—*Lancet.*

SURGERY.

ON SPERMATORRHŒA.

By J. Waring Curran, L.K., Q.C.P.I., L.R.C.S.I., Etc,

Spermatorrhœa is a disease of very frequent occurrence. Patients, as a rule, suffering from it are either ashamed to apply to a medical man for advice, or they are carried away by the loathsome advertisements and disgusting emanations admitted into the columns of the leading journals, and consult the charlatan. Accordingly, the surgeon does not obtain the number of patients suffering from spermatorrhœa which he otherwise would. If there be one disease more than another, upon which the quacks thrive, it is this. He preys upon his victim once entangled in the well-woven web of decoy, until the patient is driven nigh to madness. If exorbitant demands will no longer be paid for inert and abortive nostrums, he is threatened by exposure, and compelled thus to compromise the secrecy of a simple complaint, exaggerated and perverted by the dastard charlatan, patronized to a certain extent by the Government and its three half-penny stamp duty. This part of the subject needs legislation, even at the loss of the £63,000 paid annually upon quack medicines.

A couple of years ago a Liverpool gentleman in good circumstances wrote to me, at first anonymously, asking advice for a disease he suffered from, and enclosing a fee which I returned, as I considered I could not do my duty by him conscientiously without an interview, and named a Liverpool physician for him to wait upon. This he refused to agree to, as he dreaded detection in his native city, and that the disease (spermatorrhœa,) for such it was, would be exposed to his friends. Accordingly he came to me, a very long distance. His attention had been directed, he told me, to a paper published by me in the *Lancet*—"On the Therapeutic Action of Oxide of Zinc"—and he wished to be cured as speedily as possible of and treated for spermatorrhœa, which he had long suffered from. The gentleman was placed under treatment. He corresponded for a lengthened period, and his last letter assured me he was perfectly cured, and a paper forwarded to me in a few weeks announced his marriage. I mention the case to record the fact that this gentleman paid to a certain London quack the sum of a hundred and fifty pounds within three months, and that there were still further demands upon him from the same source, which I advised him to defend in open court, and if further threatened, to indict the party in question. "Between traveling to and from London," he said, "and the exorbitant fees demanded, I was driven desperate, particularly when I found that I made no progress towards recovery." How many poor dupes are there in England to-day, little better than my patient was; men carried away by the nature of their complaint and cleverly deluded by the worst class of ruffians who ever, as outsiders, lived upon their well laid snares or victimized a profession!

I shall treat first of the causes of spermatorrhœa in the order of frequency with which they occur, and finally, the treatment to be adopted for its cure.

(*a*) The first most frequent cause of spermatorrhœa met with by the general practitioner is that consequent upon self-pollution, and it is the most difficult to remedy at first, for the patient comes reduced in strength, anæmic, with the sexual organs weak and irritable, unfit to follow his employment, desponding and low-spirited, without suffering actual pain. The patient generally complains of weakness across the loins, a relaxed condition of scrotum, the neighboring structures always perspiring, and an aching along the inside of the thighs. He tells us, upon inquiry, that the least lascivious idea, the society of females, or even the friction of his dress, will produce imperfect erection and free seminal emission. His sleep is disturbed by disagreeable dreams terminating in emissions. His appetite is impaired, the merest trifle frightens and discourages him, and his very existence is a misery. Fanciful, irritable and desponding, with an inability to explain the nature of his ailment, he is looked upon with concern and watched with an ill-understood anxiety by his family, who are unable to comprehend the change wrought in their relation, who was hitherto genial-spirited and healthful. This class of patient, if not already impotent, will become so unless carefully treated.

(*b*) Excessive venery in the young and perhaps newly married, unless restricted and carefully treated by judicious remedies, brings about spermatorrhœa, so that in the initiatory attempt at connubial intercourse, an emission takes place and disappointment results. This condition leads to inconveniences and accusations calculated to do irreparable mischief, unless the case be confided to an honest practitioner.

(*c*) As a sequence of gonorrhœa, when particularly injections have been employed for the cure of the disease, spermatorrhœa occurs, depending upon the irritation produced upon the prostatic portion of the urethra, or that portion of it in the vicinity of the orifices of the seminal ducts. The patient thinks he is suffering from protracted gleet, but the emissions he cannot explain, as he was free from these when the gonorrhœa raged at its worst.

(*d*) The oxalic acid diathesis, from the irritating character of the urine, will, if the diathesis be not counteracted, lead to a subdued form of spermatorrhœa, the irritating properties of the urine acting on the openings of the seminal ducts, keeping up in this way excessive secretion, and promoting seminal emissions. Accompanying this form of the complaint we have authentic symptoms of the diathesis.

(*e*) Ulcers about the rectum, vesical, calculus, prostatitis, worms, *fistula-in-perineo,* stricture of the urethra, and *fistula-in-ano,* I have known to produce spermatorrhœa, but as it is merely a symptom of the original complaint, it readily abates when the disease which accompanies it is mastered.

The Treatment:—1. Spermatorrhœa from self-pollution is the most intractable and persistent. There is something in the general appearance of the patient which stamps the nature of the complaint. The muscular tissue is soft and flabby, and the color of the face is something like that of a newly-born infant. The eye is weak, prominent and watery. This watery condition of the eye is peculiar. If the patient be questioned, he will inform you that upon meeting a female friend the eye fills up with tears, so that he is unable to fix his gaze on any object. Of course we may account for this as we do for the act of blushing, as I consider it the result of nervous reflex action on the lachrymal gland.

It is little good lecturing the patient on chastity of thought and action. If he were both chaste in thought and action he would not suffer from disease, and his constitution renders him unchaste. It is only necessary to tell him that he can materially hasten or retard recovery, and that his co-operation is essential; that without a desire on his part to assist, time and money will only be wasted, and needless and vain will be the efforts of the surgeon.

I find it is absolutely necessary to make a sore in the penis. Most of these patients have a long prepuce, and I select the mucous surface of it for the production of a small sore with

an irritant caustic. The evil habit is seriously broken in upon thereby, and masturbation for a time successfully baffled. I prescribe bromide of potassium in full doses internally, and give the oxide of zinc in two grain doses twice a day, with a camphor and conium pill at bed time. Heat and cold I apply alternately to the lower spines, and order the genitals to be dashed with cold water night and morning. I enjoin a generous regimen, avoiding stimulating beverages, recommend active habits, and open air exercise, and advise the patient to retire for the night greatly fatigued, to sleep upon a hard bed with light coverings, and to arise in good time in the morning.

Some of these cases lead on to epilepsy, when the effect of Dr. Chapman's ice-bag is applicable in subduing, and eventually permanently arresting the seizures. In truth, ice to the spine is *the* only scientific and successful remedy for epilepsy, the sequence of masturbation.

Marriage must not be advised until the patient be relieved, or impotency may result, to the detriment of all parties.

2. Spermatorrhœa from excessive venery is best treated by the formation of a sore on the penis also. It is the form most closely akin to the first, and requires the same treatment. If the patient be married he must be separated from his wife. This form generally yields rapidly to treatment, a contrast to that the effect of self-pollution, which is sometimes a heartless business, always slow, and never sure.

3. Before an effectual cure is brought about for spermatorrhœa, the result of gonorrhœa, I find a blister along the perinæum necessary. Caustics to the prostatic portion of the urethra are uncertain. I have never experienced any good results from them. A belladonna suppository affords much relief, and the continued use of the tincture of the muriate of iron generally effects a cure, but the blister is a very valuable auxiliary.

4 and 5. The case of the oxalic acid diathesis and the remedying of surgical affections in the neighborhood of the genitals will usually remove the disagreeable concomitant of spermatorrhœa, which was only a symptom of the worst, however disagreeable and apt it may be to be looked upon as a disease *per se*, and treated accordingly.

As already stated, there is no subject in the whole range of medicine or surgery of more importance to the invading charlatan than that of this paper. Many thrive upon it, and the amount of injury done to body and mind of patients by those who do it, is very frequent and often irreparable.—*The Medical Mirror, April*, 1870.

GLOSSITIS AND ABSCESS ON THE TONGUE.

Cases by Henry J. Smith, L.K. Q.C.P., L.R.C.S.I., Borris in Ossory.

"I was consulted by a man, aged 33, of healthy appearance and stout make. His wife described to me the history of his case (as he could not articulate intelligibly himself) as follows: About two months previously, as was supposed, from the effects of a bad tooth, a swelling arose under the tongue and about the jaws, which appeared to engage the sublingual and submaxillary glands. The symptoms at first appeared to be very acute, causing him much distress. He placed himself under the care of a medical gentleman in his immediate locality, and under appropriate treatment, all acute symptoms seemed after a fortnight to have subsided, but a stiffness about the root of the tongue, with a slight difficulty of swallowing remained, his speech being also slightly impaired. Various remedies were given with a view to relieve these symptoms, but instead of improving they became gradually worse, and, with the advice of his medical attendant, he consulted another surgeon, who examined the case and gave the patient some medicine, to be taken daily, with a view to afford relief, and directed him to return in some days. However, finding all his symptoms becoming more urgent, he naturally became very much alarmed and sought my opinion, when his case presented the following symptoms: He could not speak intelligibly, swallowed with extreme difficulty, the effort causing much pain and a sense of suffocation; his countenance evidenced much anxiety and distress, and he feared himself he was about to die, and that nothing could be done for him. On examining his throat externally and the parts adjoining, no marked swelling was manifest, only in the mesial line, beneath the base of the tongue, where there was a well-marked tenderness and fullness. On opening the mouth, it was at once observed that the base of the tongue was so enlarged as nearly to fill the space surrounding it. On catching the point of the tongue in a dry towel and drawing it forward, the act caused extreme pain, but enabled sufficient view of the fauces and tonsils to be obtained, to see they presented no diseased condition. On pressing the forefinger into the mouth, the base of the tongue was found to be considerably thickened, and on drawing it well forward, a point more yielding than the rest was discovered along the raphe. The diagnosis arrived at was that at the time of the original attack of inflammation the body of the tongue was engaged; that it ran into the suppurative stage in this situation, and that the present distress arose from a collection of deep-seated matter in this organ. After I had concluded my examination, the man and his wife were most urgent upon me to express my opinion as to whether anything could be done or not—being so long ailing and getting worse every day, their alarm became very great. I told them at once, if my opinion as to the cause of his great distress was correct, I could afford him relief in less than a minute; but that he should allow me to make a free cut into his tongue. To this he at once agreed, and having drawn forward his tongue well, and placing his head in a forward direction to prevent matter, if there, from suddenly gushing backward, I made a free and deep incision into the swollen organ, and was gratified to find it was followed by over a dessertspoonful of matter suddenly gushing into his mouth, giving instantaneous relief to all his urgent spmptoms. I saw him in a week afterward quite convalescent.

"Twenty years ago I was called to see a young man who I was informed was choking. On a careful examination, I found exactly a similar state of the tongue to exist, the symptoms being, however, more urgent and more rapid in their development. I treated it similarly and with the same result; and it was the recollection of this case that led me to so soon form a correct diagnosis in the present instance. I consider that such cases are very rare, and this brief notice of them might be of use to others, if placed in similar circumstances."—*Medical Press and Circular.*

SALIVARY FISTULA: RECOVERY AFTER THE INTRODUCTION OF A PROBE.

Under the care of Mr. Pick, St. George's Hospital.

In the following case, the result was as satisfactory as it was unlooked for, and interesting, inasmuch as it shows how recovery may take place sometimes in a class of cases which are found, at other times, to be most intractable and difficult of cure.

"A girl, aged about twenty, presented herself as an out-patient at St. George's Hospital, under the care of Mr. Pick, suffering from salivary fistula, which caused her great annoyance, and for which she was anxious to have some operation performed.

"The history of the case was very imperfect, but it appears that, owing to some unknown cause, when a child, she had suffered from an abscess of the face, and that ever since the sinus had remained open. She had had constant dribbling of clear, watery fluid from it, which was increased during the process of eating, and she had suffered from dryness of the mouth on the affected side. She was admitted to the hospital with a view to some operative proceeding.

"Mr. Pick made an attempt to pass a small probe down the canal, in order to ascertain if any opening existed into the mouth, and after employing a slight amount of force, succeeded in passing it a short distance, perhaps half an inch, but was unable to introduce it any farther in consequence of the probe being too large. The attempt was therefore abandoned until a smaller probe could be obtained.

"The following morning the patient was surprised to find that her pillow, which was always saturated with moisture, was quite dry, and, upon examination, it was found that the opening was completely closed. She remained under observation for a week or ten days, and the part remained perfectly sound. The saliva found its way into the mouth, and she entirely lost the sensation of dryness of which she had before complained."—*Lancet.*

MISCELLANEOUS.

THE PERILS OF FASHION.

We are indebted to a lady correspondent for the correction of a mistake, or rather an omission, in our recent article on Tight Lacing. In ascribing the ungainly, feeble and tottering walk of our modern fine ladies and their middle class imitators to the decrepitude induced by tight-lacing, we omitted to mention another fashionable folly which assists in the production of this evil, and has also other sins of its own to answer for. The custom of wearing high boot-heels, and those too, so much smaller than the actual heel of the wearer as to afford no solid support, but only a balancing-point, is a source of much mischief. In the first place, it throws the centre of gravity of the body so far forward that a free and gracefully erect carriage is impossible. Secondly, there being no firm support to the heel, ladies are very apt to twist the ankle suddenly by overbalancing themselves; and this is not only bad in itself, but the fear of its occurrence makes them assume a timid, mincing gait. And thirdly, the effect of driving the foot constantly forward into the toe of the boot, is to produce a very ugly and painful distortion of the great toe joint.

There is little need for wonder at the almost fierce contempt with which young men whose characters are at all above the lowest grades of conventional inanity, regard the average "girl of the period." It cannot be denied that there is a significant correspondence between the æsthetic hideousness and the degrading effects on physical health, which are produced by tight stays and crippling boots, and a certain mental and moral tone in female society of the present day, which is no less surprising than it is repulsive. The whole dress and carriage of our fashionable women for several years, has been modelling itself, with less and less concealment, upon the ideal furnished by Parisian *lorettes* of the consumptive Traviata type. It is not our business to set up as moral censors; but we may be excused if, for once in a way, we find it impossible to ignore the logical though repulsive consistency of the *grandes dames* and the citizenesses, who are willing to spoil their lungs and their digestions, and endanger their chances of happy maternity, for the sake of a wasp waist—to talk slang closely verging on indecency, for the sake of the tenth part of a chance of catching a husband; and to simper and leer at the indecencies of a *Grande Duchesse de Gerolstein,* in order to escape the dreaded imputation of a deficiency in *chic.—Lancet, October* 2, 1869.

QUININE IN SCARLET FEVER.

Dr. Peter Hood, in the *British Medical Journal,* says that in scarlet fever, after the stomach has been relieved by an emetic, and the bowels by a proper cathartic, if necessary, the system is prepared for the "*anti-septic property of Quinine, which drug," according to his experience, "is as powerful in destroying the scarlatinal germ as it is potent in the cure of ague.*" He says the pulse is diminished in frequency, the soreness of throat and difficulty of swallowing are scarcely complained of, obviating all necessity for gargles, sponging, etc., the heat of skin is most sensibly decreased, and the restlessness is succeeded by a calm composure. In the severest forms with a dyscrastic state of the blood, discharges from the nose, mouth, eyes, ears, etc., it is imperative to administer with the quinine some preparation of iron—the tincture of the Sesqui-chloride, or the sulphate, persevered with; at the same time procuring daily evacuations from the bowels. Thorough ventilation, and the disinfection of the room with Chlorine, he regards as important in preventing contagion.

One who has carefully observed current professional opinion can but have observed the increasing favor in which quinine is regarded in various febrile and inflammatory affections. When given in doses of two grains every hour for three or four hours, and then in the same doses every two hours—or in doses from three to six or more grains at rather longer intervals, it will diminish feverish heat and the frequency of the pulse, induce perspiration, and tend to remove various forms of congestion and inflammation, are facts too well established to admit of question. Whether scarlatina is benefited by its influence in neutralizing the specific poison of that disease, or by its control of the febrile and inflammatory processes may not be so clear; but that it is a useful remedy, in many forms, at least, of the affection is as certain as most other medical maxims. This treatment would not interfere with that by the warm bath, used early and repeated as often as the strength of the patient will permit, or the severity of the disease require, "dabbing" dry with a soft towel, as so strongly recommended by Dr. C. T. Thompson in the *Lancet*; or any other adjuvants the particular conditions might call for. A. B. P.

TOOTHACHE AMONG THE ANCIENTS.

One by one our illusions as to the "good old times" vanish. Long had we cherished an idea that at least decayed teeth were unknown to our hardy ancestors, and were the peculiar privilege of our civilization. Mr. Mummery, in an able paper before the Odontological Society, has shown, however, that teeth were at times unsound even when the ancient inhabitants of the British Islands lived on coarse meal or the produce of the chase. Mr. Mummery has examined all the ancient skulls within his reach in order to

determine this point. Beginning with the long-headed race, who are the earliest known human inhabitants, and have been supposed to be of a Basque type, he found few instances of real decay, not many of wearing down, and none of dental irregularity amongst sixty-eight Wiltshire skulls; whilst amongst the round-headed skulls from the same county, supposed to belong to the later Belgic immigrants whom Cæsar found in possession of the southern part of the island, there were many more cases of caries, more also of wearing away, and some of irregularity, which Mr. Mummery believes to be indicative of a coarse vegetable diet and scarcity of animal food. Oddly enough, in Yorkshire the skulls of the earlier or long-headed race exhibit many signs of dental disease, both caries, wear and tear, and signs of abcess. As for the Romans in Britain, the practice of burning their dead makes collecting of skulls by no means easy, yet out of 143 Britanno-Roman skulls 41 had carious teeth; irregularity and abcess were also common, but not wearing away. No traces of stopping or of artificial teeth have been found. Amongst Egyptian skulls wearing of the teeth is very common from the gritty, sandy character of the flour, and caries is by no means unfrequent. There are no traces of stopping, and it seems that the art of dentistry was almost confined to to the extraction of teeth. Mr. Mummery's conclusion is that dental disease is not the exclusive privilege of a high state of civilization.—*London Medical Times and Gazette.*

THE FATE OF MEDICAL STUDENTS.

In a brief and brilliant article that forms a part of the fifth volume of the St. Bartholomew's Hospital Reports, Mr. Paget has, with much labor and considerable perspicuity, given the reader an analysis of the careers of 1,000 medical students, all of whom have been known to and observed by him or by his colleagues, Mr. Callender and Mr. Thomas Smith, during a period of fifteen years. He has placed them in eight divisions, and tells us that 23 have achieved distinguished success, 66 considerable success, 507 fair success and 124 very limited success; that 56 failed entirely, 96 left the profession, 87 died within twelve years of commencing practice, and 41 died during pupilage.—*N. Y. Medical Record.*

THE WEATHER AT HALIFAX, N. S., IN 1867.

We learn from Frederick Allison's paper, styled "Notes on the Weather at Halifax, N. S., during the year 1867," published in the *Transactions of the Nova Scotian Institution of Natural Sciences*, the following particulars in regard to that climate: Rain or snow fell on 222 days. The mean temperature of the year was 41° 98, being ·89 below 1866. The thermometer marked from 88° on the 10th of August, down to 9° ·3 below zero on the 30th and 31st of January—a range of 97° ·3.

There were 87 days' sleighing in the year. Hoar frost formed on 32 mornings. The Aurora Borealis was visible on 32 nights. That of the night of the 8th of February was a beautiful sight. On 183 days the Nova Scotians in Halifax had frost. The longest period that it was absent was from the 11th of June to the 12th of September; the earliest, viz: from 12th, 15th and 24th September and 1st October, read from ground thermometer.

ON SOME NEW SUBSTANCES EXTRACTED FROM THE WALNUT.

Dr. Phipson, F. C. S. read a paper on this subject before the British Association, in which he announces the discovery of a new species of tannin—for which the name *nucitannin* is suggested. The new substance was obtained by digesting the skin of the walnut in alcohol, and possesses the property, when boiled for several hours with dilute hydro-chloric acid, of splitting up into glucose, and a red substance, which the author proposes calling *rothic acid.* This acid is described as a brown amorphous substance, combining readily with bases; soluble in alcohol; and having the composition $C_{28}H_{12}O_{14}$. The rothates of potash, soda and ammonia are soluble, the rothate of silver forms a fawn-colored precipitate, becoming darker by drying, but not very sensitive to the action of light. The preparation, properties and composition of nucitannin are reserved by the author for a future paper. —*Canadian Pharmaceutical Journal.*

A COMBINED WIRE SPECULUM AND RETRACTOR.

Dr. Francis H. Brown, of Boston, in vaginal operations employs a simple iron wire speculum, which answers the additional purpose of a retractor. Both folds are shaped nearly in the form of the letter S. Five sizes are made by Dr. B., of iron wire, joined by hard solder and then nickelized. The iron used is numbered 10 and 13 of Stubbs (English) wire gauge. The objects for which he proposes these instruments are the following: Singly, the larger instrument has been found well adapted to take the place of Sim's speculum. It displays the vagina equally well; it is much lighter; equally strong; and no less easy of application. The two together, as retractors or in place of the copper spatulæ, have served well to dilate the vagina, and bring into view every part of its wall, up to the cervix. A still further advantage of these instruments is their very trifling expense, the whole set of four being furnished by instrument makers at a sixth part of the price charged for any of the elaborate forms of specula.—*N. Y. Medical Record.*

An adventurer who entered the Philadelphia University the other day, stating that he was a delegate from the State of New York to the National Eclectic Medical Association, and was anxious to find the august assemblage, when we politely informed him that it was the first intimation we had of the existence of such a society. He replied that that was very strange, as a portion of the Eclectics of New York opposed the Newton monopoly, and had sent delegates to Philadelphia. We answered that we knew nothing of the matter, when he inquired if that was not the Eclectic College. We informed him it was not. He then wished to know if it was Homœpathic. We told him no He replied that he supposed it must be Allopathic. We stated that it was not. He then wished to know what it was, when he was informed that it was a medical college where the science and art of medicine was taught and learned, according to the most enlightened clinical experience and scientific researches of all the great minds of the profession, irrespective of sectarian limits or party boundaries. He stepped back, took a survey of the building, and replied *that* was strange. The poor fellow, if educated at all, was probably instructed in some narrow-minded, bigoted, sectarian medical college, and had never before conceived the idea that a great and useful profession could exist without a medical creed, or belonging to some of the modern medical isms of the day.—*Philadelphia University Journal of Medicine and Surgery.*

Errata.—On Page 199, second line, for Van Zant read Van Sant.

ORIGINAL COMMUNICATIONS.

RANDOM THOUGHTS ON "CONSERVATIVE MEDICINE."

Read before the Sacramento Society for Medical Improvement, February 22nd, By A. B. Nixon, M. D.

We find in all the domains of animate and inanimate matter a power constantly and untiringly at work to prevent the decline and death of all organized beings and substances; but as this paper is designed more particularly to apply to the effort of nature in removing disease from the human system, I shall confine my remarks to the latter subject alone. I think it may be truthfully said that most young medical men believe more in the potency of medicine in the cure of disease than the older ones in the profession, and I account for the fact in this way—that to them the study of medicine embraces the art of curing diseases. Now when we stop to consider the fact, how many diseases are incurable, we will readily discover the falsity of the definition. A better and truer definition would be, that medicine is the *Art* of *understanding* diseases and curing or ameliorating them if possible. According to this definition of the science of the healing art, we would be exonerated at least from reproach, and would stand upon a basis capable of supporting a reasonable and durable system for the amelioration of human suffering. Every member of the medical profession should ask himself, is Medicine a liberal and honorable science, to be followed for the good it may do to mankind, or is it a dishonest trade, to be pursued for the purpose of benefiting himself by the deception of his fellow men? If he accepts his profession in the first sense, he will strive to understand this science in all its bearings, and practice it with consciousness and fidelity; if in the latter, he will put conscience aside and study only the low arts which entrap the credulous and unsuspecting. No great distinction, and certainly no great usefulness, can be attained without knowledge of the principles of the profession and science of medicine, and this knowledge must consist in the comprehension and accurate understanding of the structure and offices of the human body, and the laws of its normal and healthy condition. Then after this knowledge, must follow an accurate understanding of pathological conditions, from which fundamental principle a correct diagnosis may be arrived at, and by which the diseases of the human body are detected and distinguished from each other, and the power of distinguishing diseases correctly lies at the very root of all enlightened practice; and without it all medical inference is empirical and dangerous. It is certainly a very grave error for a physician to think that he can safely prescribe for the symptoms of a sick person without understanding in some degree the nature of his disease. *Correct diagnosis* must be the *starting point* in the successful treatment of all diseases, but some human constitutions will recover from very serious sickness, notwithstanding a large amount of useless drugging and bad treatment. Deceptions in medicine are not occasioned only by the dishonesty of charlatans and quacks, but quite as often, perhaps, by the well meaning credulity of other practitioners, whose intellect is impulsive or whose education has been unduly curtailed and neglected. It is so very flattering to believe that our chance shots have sometimes taken effect, that we may pass our lives in mere speculations and random efforts at curing diseases, shutting our eyes against our own failures and not allowing ourselves to consider that in a certain portion of successful cases which we had failed to understand, the disease in truth got well without, or perhaps in spite, of our misdirected and embarrassing practice. However, I believe medicine to be a great blessing to mankind when it is administered by discriminating and intelligent hands, with sincerity and judgment. But the first great question which presents itself in every case or emergency is that which involves the diagnosis. This being established the practitioner is enabled to avail himself of the lights of reason and experience in regard to a correct therapeutic proceeding. It often happens, however, that the nature of the case cannot be made out in one, two or three interviews with the patient, and we are obliged to wait for the gradual development of diagnostic symptoms. It is a mistaken pride which leads physicians to commit themselves by an oracular guess at first sight which the events of the succeeding day may show to have been erroneous. Having settled as well as we can, after deliberate care and investigation, the pathological condition of the patient, the next question should be what would be the probable tendency of the disease if left to itself? Careful attention should be paid by the physician when the general system becomes disturbed, as many diseases are very insidious in their origin. For instance, there is the slight cough and evening flush which indicates the approaching phthisis which may soon get beyond the bounds of remedy. A protracted intermittent may undermine the health and vigor of the constitution and become the cause of incurable disease. Syphilis neglected or imperfectly cured may end in long suffering and a miserable death; you will all readily admit that such diseases require prompt and sometimes energetic treatment on the

part of the physician. On the other hand, diseases which are light in their nature and tend to speedy recovery, may safely be left to themselves or treated with the mildest remedies and cautionary measures. Careful consideration should always be given to the effect and tendency of the remedy used, and whether the means employed to counteract existing diseases do not in their turn produce evil to the patient. Many remedial measures we know if employed too frequently result in permanent injury to the patient. The habitual use of cathartics seldom fails to bring on a permanent state of costiveness. Opium and other narcotics are often fertile sources of disease, and I think the modern evil of our time is over-medication. It is no doubt profitable to druggists but injurious to the drugged.

It is wrong to suppose, as is often the case, that the opportunities for doing good in medicine are limited to the effect of specific remedies, or to the application of drugs and instruments. The practitioner should survey the whole ground of his patient's case and try and ascertain what are the deleterious agencies or remote causes of disease. Many diseases which have resisted powerful remedies, cease speedily on the discovery and removal of their sustaining cause; and this is so with various specific complaints produced by particular drugs and stimulants when habitually used. A child is often sick from an error in the diet, health or habits of the nurse or mother. Many suffer from quality and quantity of their habitual food and drink, or from exercise or want of exercise, air, occupation, or clothing. The starved infant and the overfed gourmand, the drunkard and the ascetic, the pale student and the emaciated seamstress, require removal and reform, not drugs and medicines. A patient may die of phthisis in a confined office or damp northern climate, who might have enjoyed good health and long life in an active occupation or in a more pure and temperate atmosphere. It is as necessary in many cases that the physician should enquire into the situation, diet, habits and occupation of the patient, as that he should feel his pulse, explore his chest, or examine his tongue, and it often happens that the disordered state of the one cannot be corrected until the other has been previously set right; and often a little dietetic instruction or even moral advice is more serviceable than a technical prescription. The dignity of our science, and the responsibility of our profession require that we should form just views of the extent of our capacity and duty, and that we should not shrink from avowing them to the world. Our science, imperfect as it is, has achieved probably as much as any similar science for the prevention, alleviation and removal of the evils which it combats. We should not bring our profession into disrepute by pretending to impossibilities and asserting what human art is not able to accomplish. The tendency of modern observation is such as to lead us to believe that disease is less frequently under the control of remedial treatment than it was formerly supposed to be. Where observations have been carefully made by competent persons I believe it has been found that people recover and also die under all the ordinary modes of treatment, and the evidence collected from such sources, which are worthy of reliance, is not so abundant or satisfactory as to convince any reasonable man that any general system of practice can be relied on for the cure of all cases. It is not surprising by any means that the credulous, the ignorant and the interested should embrace widely different theories and diversities in practice. The broadest division and the one to me the most rational, is that which resolves the whole subject into the active and expectant modes of practice. The first employs remedial and interfering agencies in the management of the sick; the latter waits more on the unassisted course of nature, and to which division Homœopathy really though not avowedly, belongs. Its character is such, that in reality it waits on the natural course of events, it commends itself to the ignorant and credulous, by a professed introduction into the body of inappreciable quantities of medicinal remedies.

I think it can be truthfully said that we often exaggerate the usefulness of the doctrines in which we have been educated, and especially those by the exercise of which we obtain our daily bread. In such cases habit may get the ascendancy over enlightened judgment; and the man of routine or of narrow views will ask himself from day to day what drug or what application he will next resort to, instead of asking the more important question whether any drug or any appliance whatever is called for or even admissable in the case. True medical skill must always lie in accurate discrimination of pathological conditions and correct diagnosis; the curative means which follow may vary according to the judgment and experience of the practitioner.

OPERATION FOR RADICAL CURE OF HERNIA.

By A. T. Hudson, M. D., Stockton, Cal.

Mr. H. D. S., aged thirty-five, presented himself for operation Nov. 10th, 1869. He had inguinal hernia of right side, two years duration; it was not large and did not extend to the scrotum.

Chisholm's plan was chosen and aimed to be followed; but not having his description at hand, an imperfect memory of it allowed considerable departure of the operation from his.

A vertical line is drawn on the skin across the centre of the ring; then a curved hollow or tubular needle is entered at the lower edge of the ring, in this line, and carried under the skin a little past the margin of the abdominal column of the ring. Then the point of the needle dipped down through the wall of the ring, passed from below upwards through the wall again. But as the needle's point came to the skin, this integument was drawn over toward the needle so it should make its exit through the skin in the vertical line. The needle is now armed with silver wire and withdrawn, leaving the wire in the track made by the needle. The motion of the needle under the skin is much like that of the shoemaker's awl when he takes a stitch in leather. The unarmed needle is next re-introduced in the same opening made at first, pierces the opposite column in like manner as before, and passes out at the same second opening through the skin. The needle is again armed with the upper end of the same wire and brought through the needle's track in the poupartic column. These stitches include about three eighths of an an inch of the column on either side. The sutures are now tightened, twisted, cut short and retracted under the skin through the opening, and the work is done.

Six months have now passed with no return of the hernia.

A re-perusal of Chisholm's plan shows this difference: He carries the fundus of the scrotum on the finger into the ring, and includes the scrotal facia in the suture. In his operation each column of the ring was only once transfixed, which allowed him more freedom of the needle; mine twice transfixed the columns.

One feature occurred which somewhat embarrassed the expertness of the operation. The needle being passed first through the inner or abdominal side of the ring, is accomplished easily enough. But the poupartic column is so unyielding, and holds the needle so firmly, it prevents the ready manipulation of the point, and bringing out at the upper aperture in the median line of the skin. It is quite likely this difficulty may be avoided by commencing the operation on the poupartic side.

Twenty-four hours after the operation, the pulse rose to 120, with a white tongue, some local tenderness or hardness.

Water dressing and half a grain of morphine every six hours relieved these symptoms; and in twenty-four hours more the frightful foreboding of peritonitis disappeared. No motion of the bowels occurred for eight days, when an enema secured it.

AMPUTATION AT THE SHOULDER.

By W. F. McNutt, M. D., M. R. C. S. Ed., L. R. C. P. Ed. Etc.

The Paris correspondent of the *Medical Times and Gazette*, under date of Feb. 20, describes M. Verneuil's modification of Larrey's *procedé en raquette*, for the disarticulation at the shoulder joint. The advantages claimed for the modification over Larrey's procedure, consists in (1) the position of the patient; (2) hemorrhage impossible; (3) no aid required; (4) ligature of the veins; (5) resection of the nerves.

In Dr. Larrey's process, patient sits up, which must be unsafe in case of either chloroform or hemorrhage. The artery must be compressed, which is not always easy, safe or convenient, besides being unnecessary. M. Verneuil's method is as follows:

"The patient is placed upon his back near the edge of the bed, the point of the knife (very much like in Larrey's process) is introduced a little below and inside the acromion and carried in a vertical direction downwards a distance of 2½ inches, cutting through the deltoid to the bone. An anterior flap is now traced with the blade of the bistoury, beginning a little below the superior extremity of the first incision and following in an oblique direction down and inwards, until arrived at the inferior limit of the axilla on the arm. The posterior flap is traced in a similar manner upon the posterior aspect of the shoulder, or may also be made by continuing the incision for the anterior flap out and upwards to the first starting point. Thus far, nothing more than the skin has been incised. The muscles in the anterior flap are then divided by successively cutting through the deltoid, the pectoralis major, beneath which lies the long tendon of the biceps and the coraco-brachralis. This brings to view the vasculo-nervous fasciculus of the axillary vessels and nerves. After dissecting the flap upwards, a needle of Deschamps is passed beneath the axillary artery and vein above the point of origin of the anterior circumflex and inferior scapular arteries. The completion of the anterior and the section of the posterior flap, together with the disarticulation, can now be effected with ease and without assistance."

To say the least, we cannot but think Verneuil's method unnecessarily tedious, especially as it is recommended as a "great desideratum to the military surgeon, who may have to operate without any assistance;" and which we think, might prove very embarrassing under the following circumstances:

On the night of November 23rd, 1863, the passenger steamer "Black Hawk," (Mississippi River) was fired into by light artillery. I went on board taking with me amputating case, chloroform, bandages, etc., and found several wounded, one whose leg had to be amputated, and one whose left arm was so severely injured by the base of a six-pound shell,

that amputation at the shoulder was necessary. Having no one with me that I could persuade to attempt the compression of the artery, or even to have anything to do in any way with the chloroform, and no better light to be procured in the confusion than a small kerosene lamp with a broken chimney, I proceeded to amputate the shoulder as follows: Chloroforming the patient thoroughly, I entered the knife close by the acromion, gliding it over the humerus to appear at the posterior fold of the axilla, and cutting outwards and downwards, the posterior or external flap was completed. Paymaster E. N. Whitehouse, (of Chicago) holding the flap up, I opened the joint, forced the head of the bone outward, and pressed the knife behind it and close to the shaft of the bone. Paymaster Whitehouse then taking the arm, I placed my left hand in the axilla, with the palm to the flap, my thumb passing along the back of the knife, I had a firm grasp of what was to be the anterior or internal flap, which of course contained the vessels, then cutting on, finished the internal flap. Taking up the forceps I seized the arteries which were tied by Paymaster Whitehouse. There was scarcely any hemorrhage. As I had no one to keep the patient under chloroform rapidity was a great desideratum. And under the same embarrassing circumstances, I would feel inclined to operate in the same manner, rather than that of Verneuil's method as described above.

INDIAN ARROW WOUND IN ARM.

By J. D. B. Stillman, M. D.

On the 9th of March last, Mr. V——., a clerk in the Pay Department of the U. S. army, travelling with an escort of seven men between camps Keno and McDowell, Arizona, was ambuscaded by a party of Apaches. At the distance of about twelve feet an Indian shot an arrow directed to the heart of Mr. V—— which was arrested by striking the os humerus at about its centre. The face of the arrow was such and directed so perfectly at right angles to the bone, that the head of it, which was of stone, was fixed in the arm and the wooden shaft was split for about two inches of its length and driven past the shaft of the bone, one-half of the split portion going on one side and the other half on the other, when they were broken off and concealed in the muscular tissues of the biceps and triceps respectively.

When the man felt himself wounded he put his hand upon the spot and found only the head of the arrow in the wound, which he extracted with his fingers, the unsplit portion of the arrow having fallen to the ground. On applying to the surgeon of the next fort an examination of the wound was made but nothing appearing save a small opening through the skin, it was dressed in the usual manner and the patient continued his journey. On the 16th of April last he came under my care. The wound had re-opened, was discharging freely and the whole arm badly swollen and boggy. A probe detected the presence of foreign substance and opened the passage to the free discharge of pus. A few incisions were made and several pieces of the splintered arrow were extracted; the largest was about two inches in length with the black resinous matter used in fitting the head of the arrow, still adherent. The indentation in the bone could be easily felt with the fingers and several small fragments of stone escaped with the pus. The extensive diffusion of abcesses resulting from the wound rendered it necessary to make four free openings on opposite sides of the arm, and finally the insertion of a drainage tube before the arm could be reduced to a healthy condition.

The impression was made that the arrow was poisonous, but I think not. It is well known that the Apaches and other tribes of Arizona do not poison their arrows. The formidable effects of this wound must be ascribed to the fact that the shaft of the arrow being of reed was "broomed" or split into numerous needle-like fragments which were driven into the muscular tissues, each forming a separate radius and centre of inflammatory action. The number of these speculæ of wood that have been removed and have discharged themselves was not determined, but was large.

AUTOPSIES MADE BY J. LETTERMAN, M. D., CORONER OF SAN FRANCISCO.

Reported by Edwin Bentley, Assistant Surgeon in the U. S. Army.

Case 57th. "Consumption."

P. F., white, male, German, coaster, aged forty-one (41) years.

History. This man had been an invalid for several years. When his health would permit, he followed coasting and steamboating, and finally finding himself unable to work longer, he was admitted to Hospital, where in the course of a few hours he died.

Autopsy six (6) hours after death; no rigor mortis formed; pupils dilated; body well developed, very little emaciation; marks of syphilis about the glans penis.

Head. Dark blood from the usual scalp incision; vessels of the membranes injected with blood; cerebral arteries distended with blood; brain of normal consistence, congestion indicated by drops of blood

rising on the surface of sections made through the medullary structure; an ounce of fluid at the base of the skull.

Thorax. Lungs strongly adherent, gray tubercles interspersed throughout the lobes; consolidation especially marked in the upper lobes, and the cortal pleuræ nearly an eighth of an inch in thickness; pericardium contained about three drachms of serum; no disease of the valves; left side empty, right side loaded with coagulæ.

Abdomen. Sections of the liver bled freely; spleen soft, kidneys hyperæmic; stomach and intestines healthy.

Case 58th. "Chronic Rheumatism."

J. B., white, male, German, laborer, aged thirty-four (34) years.

Autopsy twelve (12) hours after death; rigor mortis strong; dark cicatrix at the outside of the left knee; slight emaciation; right testicle enlarged; pupils normal.

Head. Scalp pale, incisions free from blood; membranes anæmic; brain of firm consistence; little cysts in the choroid flexus; ventricles full of serum.

Thorax. Large puckered cicatrices in the upper lobes of the lungs; strong adhesions posteriorly; nearly an ounce of serum in the pericardium. Left ventricle enlarged and empty, right ventricle with its walls very thin; right side of the heart distended with post-mortem clots.

Abdomen. Liver cirrhosed, spleen small, kidneys congested; mucous membrane of stomach inflamed; intestines healthy.

Remarks. Sub-acute inflammation in all the larger joints; the capsule and ligaments thickened; the cartilages of the knee-joints, soft, relaxed, and of a yellowish color.

Case 59th. "Fracture of the Skull."

J. K., white, male, English, aged twenty-one (21) years.

History. This man is reported to have been a regular drinker though seldom drunk. While at sea he was sent to the mast-head of the vessel to arrange some part of the rigging, in doing which, he fell to the deck and was taken up in an unconscious condition.

Autopsy twenty-four (24) hours after death; bloody froth running from the mouth; contusion over the left eye; blood flowing from the left ear; pupils dilated; rigor mortis very strong; urine leaking from the external meatus urinarius; Sectio Cadaveris.

Head. Scalp congested and bleeding freely from the incisions made. On raising the vortex of the skull, fracture extending from the super-orbital ridge of the left side to the coronal suture above, through the orbital process below, extending across the squamous portion of the left temporal bone, a distinct seam being traceable to the anterior part of the inner table of the petrous bone. The base and left side of the skull was covered with a layer of coagulated blood.

Thorax. Stasis of the posterior parts of the lungs; no pleuritic adhesions; cavities of the heart empty,

Abdomen. Convex surface of the liver showing mottled appearance, sections of a light gray color; spleen pulpy, kidneys hyperæmic; stomach and intestines healthy; bladder distended with urine.

Case 60th. "Poisoning;" (Laudanum and Alcohol.)

C. B. E., white, American, surveyor, aged forty-two (42).

History. This man had obtained a reputation for excellence as a draughtsman, and had long been reckoned among the best on this coast; yet his habits were such as would scarcely exclude him from the class of habitual drunkards. He was found dead, with a phial of laudanum by his side. He was reported to have been subject to occasional sprees, at which times he mixed his liquors with laudanum.

Autopsy about eighteen hours after death; face and left side of the body of a livid, purple color; no discharges from the external orifices; tongue pressing against the teeth; pupils contracted; subcutaneous veins on the left side of the neck dilated; rigor mortis well formed: Sectio Cadaveris.

Head. Scalp congested; dark venous blood flowing freely from the incisions; fluid blood ran in a free stream from the longitudinal sinus; serous effusion over the surface of the cerebrum; brain firm; cerebral vessels injected.

Thorax: Lungs congested and inflated; no adhesion; fluid blood in all the cavities of the heart.

Abdomen. Liver cirrhosed and fatty; spleen large and soft, kidneys hyperæmic; mucous surface of the stomach intensely inflamed and engorged with blood; intestines healthy; bladder nearly empty.

Remarks. A distinct oder of opium observable in the semi-fluid contents of the stomach.

Case 61st. "Hæmoptysis."

J. H. C., American, cook, aged thirty-six (36) years. Reported to have been addicted to habits of intemperance, and by imprudence and exposure contracted disease, became a confirmed invalid; spending most of his time in the Asylums of the city, with occasional intervals of relief, in which he would go out, (as he would vary in pursuit of work.) In one of those journeys, when nearly two miles from the hospital, he was attacked with a severe

hemorrhage; he fell exhausted and death immediately ensued from suffocation.

Autopsy thirty (30) hours after death; no rigor mortis; great emaciation; slight œdema of the feet; bloodless whiteness of the integuments; pupils dilated; anterior portion of the chest covered with blood, which had ran from the mouth and nose. Sectio Cadaveris.

Head. Dissection of the scalp without any blood flowing; skull very white; membranes pale and anæmic; effusion of serum underneath the cervical layer of the arachnoid.

Thorax. Large vomica, involving the entire upper lobe of the left lung, into which a large vessel had ruptured; small cavities in the lobes of the right lung; cavities of the heart empty; right ventricle enlarged.

Abdomen. Liver fatty.

Case 62d. "Fracture of the Skull from Pistol Shot Wound."

D. W., German, saloon-keeper, aged twenty-nine (29) years. Reported to have been shot in a quarrel with a man, noted as a continual drunkard, always fighting and in trouble from his school-boy days.

Autopsy twelve (12) hours after death; face and dependent parts of a dark purple hue; cutaneous veins injected and marked by blue lines along their course on the arms and chest; pupils dilated; slight rigor; a T shaped wound in the scalp, on the right side of the head, above the mastoid, and behind the squamous portions of the temporal bone; a well nourished, muscular physique; Sectio Cadaveris.

Head. The scalp congested and bleeding on dissection, and when raised, possessed a thickened, œdematous feel like phlegmous erysipelas; corresponding with the external wound was a circular hole in the skull, half an inch by three-eighths in diameter, from which blood and brain substance had been running. On removing the top of the skull the vessels of the brain and membranes were found to be engorged, and the base of the cerebrum lacerated by the passage across of a Derringer pistol ball, from near the centre of the middle lobe of the right side, in a direction forwards and upwards, to the surface of the left frontal lobe, pierced the dura-mater, and struck against the inner table of the skull, where it made a white mark without fracturing it, but producing a stellated fracture of the external table, an inch above the external angular process, behind the temporal ridge, and under the anterior ridge of the attachment of the temporal muscle. This fracture in the left temple extends two inches longitudinally and two inches and a half transversely.

Thorax. Lungs strongly attached to the walls of the chest by old pleuritic adhesions; heart flaccid, cavities empty, valves healthy; no atheroma of the arteries.

Abdomen. Liver cirrhosed; spleen very soft; kidneys granular, and in the incisions, globules of oil could be distinctly seen; stomach very soft; intestines tympanitic; bladder empty.

Remarks. The functions of the mind were immediately suspended on the receipt of the wound, although those of animal life continued for nearly six hours, until the effusion, serum and blood had extended over the base of the skull, to embarrass the action of the eighth pair of cranial nerves of Willis when death followed, by coma.

Case 63d. "Poisoning by Tinct. Aconitine."

H. F., Irish, laborer. Found dead with a bottle of medicine in pocket, which was ascertained to be Tinct. Aconitine, a part of which had been taken. Reported to have been dissolute and reckless.

Autopsy about twelve (12) hours after death; body warm and well nourished; medium size; rigor mortis very strong; deep suggillations about the face, neck and abdomen; pupils not dilated; Sectio Cadaveris.

Head. From incisions made to raise the scalp, it bled freely; pericardium congested; calvarium raised, the pacchyonian glands very prominent on the left side, corresponding to a deep excavation in the bone over them; meningeal and cerebral vessels injected; two ounces of serum at the base of the brain and under the arachnoid; piamater injected; substance of the brain normal.

Thorax. Hyperstasis of the lungs; right lung strongly attached by old adhesions; pericardium contained two drachms of serum; heart tense from distension of all its cavities with fluid blood; no lesion of the valves.

Abdomen. Liver congested, bleeding freely from sections; spleen soft and pulpy; pancreas of a pinkish color; kidneys congested; mucous membrane of the stomach, small intestines and æsophagus intensely inflamed; lacteals injected with lymph, admitting of a favorable tracing of the lymphatics, the receptaculum chyli, and the thoracic duct along its course from the right to the left of the aortic to its final termination at the junction of the left subclavian and jugular veins.

Remarks. From the frequent sudden deaths which have recently occurred, which have at least a suspicious association with the Tinct. of Aconite, it would be well to remember the observation of Professor Taylor, in his late works on Poisons, "That Fleming's tincture is as deadly in its operation as prussic acid," and from its appearance, might be mistaken for *Sherry wine.*

REMINISCENCES OF A NON-PROFESSIONAL.

A good many years ago, I was officer, par excellence, of an opium trader, lying at Whampoa, on the Canton river. Our captain was a mass of putrid sores all over, or, as a sailor would express it, he was "barnacled from clew to earing." We will not be particular about *what* was the matter. When any of the crew was asked, 'what ail's your cap'en? the reply, laconic and expressive was 'Secondaries" Aye, aye, *Secondaries alias Retributories*, the penalties of empirical ignorance. There is a moralising vein half revealed by the word, but we will not pursue it. Poet Burns wrote :

'Tis not the quondam of the sin
Nor yet the truth revealing,
But oh, it hardens a within
And petrifies the feeling.

Our Lazarus, for some reason or other, had refused, both at Calcutta and Singapore, to avail himself of medical aid. He set up as a quack for his own particular benefit and that of the druggists. How he escaped poisoning himself has always been to me a puzzle. The second officer, a youth brimful of hypothesis, suggested that by taking "sum'at" out of the three dozen medical bottles, he counted in his state room, he had concocted a *Patent Neutralizer*, which held him in statu quo, or, as he expressed it, hung him like Mahomet's coffin, 'twixt heaven and earth, and the 'tother place. That as it may, our olfactory nerves could stand it no longer, and as he still refused to receive a visit from an American or European doctor, I asked him in a fit of desperation one day if he would accept of the services of a Chinese medical savan. Somewhat to my amusement he anxiously asked where one was to be found and if I would send for him forthwith. With the assistance of 'Boston Jack,' the *Comprodore*, I introduced to him in the course of the day, the most antique looking specimen of humanity I had seen in Chinadom. "Boston Jack" stood interpreter. The first thing settled was to the patient's satisfaction. "John, he cure-ee all right-eh?" "Yes, he savee cure-ee all right-eh." The next point was to the satisfaction of the Doctor. "Doller, Capitan, you sav-ee he want-ee one hundred doller; suppose no catch-ee no make-ee cure-ee eh." Had the captain been as flat broke in pocket as he was in common sense there would have been a prudent end to the negotiation. We have always admired the practical wisdom expressed in the Scotch minister's prayer, that "the Lord would give his parishioners *nae mair siller* unless he He gave them *mair wit to guide it.*" Our Celestial Esculapius agreed to effect a complete cure, and have his patient so far advanced in twelve days that he would be able to attend to his duties in a *mild* way, for the fee of one hundred dollars; medicine and incidental expenses extra charge. What he actually did or attempted to do, we really cannot say, but his modus-operandi was so original that we feel a little stultified in making it known to the Western world. Externally he applied some sort of herb salve to the sores, but he carefully shrouded from the eyes of the uninitiated the mystic drug of potent power by which he sought to recuperate the vital energies of physical eing. It was administered through a medium. A duck was starved for twenty-four hours—so they said—and then received food mixed with the medicine. Some hours afterwards the duck was killed and brought on board to our Chinese cooks, who hashed it up into a savory mess with which the patient was regaled. In other words, the duck *gobbled* the medicine and the captain gobbled the duck. The *dose* was a duck per diem, and in justice to the Mongolian we would state that symptoms of convalescence appeared before the patient had swallowed an average *flock*. When the practice of medicated fowl was introduced into Chinese Pharmacy, it is impossible to conjecture. They are a curious people and stumble upon discoveries in odd ways to-wit; their first appreciation of the savory excellence of roast pork, according to Charles Lamb was by the accidental burning of a Mandarin's house. For generations they considered that the exquisite flavor was derived from the conflagration of Mandarins' edifices. It is possible that from a literal following of the Shakesperian adage, "Throw physic to the dogs,"—dogs being in the list of edibles in Chinadom—they may hit upon the more *recherche* mode of fowl mediums. The captain's sores soon assumed a kiln dried appearance, with a flaky excresence exceedingly tempting to the activity of the finger nails. In fact, the Chinaman had apparently made him so far a *duck* of a fellow that he cheerfully paid him his stipulated fee. Alas! to those who entrust themselves in the hands of the *gobblers*, before we reached Calcutta, Lazarus was himself again, and was compelled ultimately, according to my irrepressible junior, to go in dock and get hove down and overhauled ship shape fashion.

S.

CORRESPONDENCE.

PHILADELPHIA, May 14th, 1870

Editors California Medical Gazette:

One of the most interesting scientific reunions ever held in this city occurred last evening, when the Biological and Microscopical sections of the Academy of Natural Sciences gave their First Annual

Reception. The College of Physicians very generously gave the free use of their entire building, and also exhibited many of their models and specimens from their fine museum. Nearly a thousand ladies and gentlemen were present in the rooms, which were decorated with evergreens and flowers.

In one room Dr. J. Solis Cohen exhibited his splendid drawings, models, and apparatus to illustrate the phenomena of sound and voice. Among the most pleasing experiments were those showing the analysis of the varying vibrations caused by different musical notes, such as the fundamental tone and its third, fifth, octave, etc., and the different vowels. Each note caused a gas jet to leap responsively, by means of an intervening membrane, and the vibratory leaps were analysed and separated by a revolving mirror. Prof. R. E. Rogers, of the University, in another room exhibited his fine Electrical apparatus, and repeated many of Tyndall's experiments with the electric light, showing the decomposition of water, the smoke clouds from flame, etc. In another room Dr. Grier had collected a large number of electrical and galvanic apparatus used in medicine, and also various instruments for physiological research, including various hæmadquemometers, pulse registers by means of an electric bell, the electric probe to demonstrate the existence of a bullet or other metallic body within the tissues. Three large tables also were covered with Auzoux's and other models illustrating the anatomy of the horse, the ear, the eye, the brain, and spinal cord of man; the comparative anatomy of the nervous system, the organs of digestion and circulation; skulls mounted *a la* Bauchine, and wax models of the arteries, veins and nerves, the appearance of cholera patients, etc. The *coup d'oeil* of the Microscope Rooms, however, was the finest exhibition. Nearly a hundred microscopes were on the tables, illustrating different forms of the instrument from one of 1708 down to the latest and best binocular of Zentmayer. One of the chandeliers was removed and by a connecting gas pipe a large number of lights were arranged for the exhibition both of the instruments and objects. Among the former there were, besides those already mentioned, a Chevallier dissecting microscope, a chemical microscope, various forms of clinical microscopes, the micro-spectroscope; and among the latter, Möller's diatone plate (costing $50), the diamond beetel, the amœboid movement of the blood corpuscles (by a one-twenty-fifth) the spectrum of the blood, some of Hyrtl's Thiersch's fine injections, (several of the last being entire sections of the cerebrum, cerebellum, kidneys, etc.,) and very many other beautiful specimens. The instruments, apparatus and slides in this room alone, represented largely over $25,000 in value, and probably the total cost of the apparatus exhibited did not fall far short of $50,000..

At nine o'clock Dr. J. G. Hunt gave an exhibition of the Gas-Microscope with the oxy-hydrogen light. If any doubt existed in the minds of those present as to the adaptability of this instrument to the demonstration of the finer anatomy of both vegetable and animal tissues to large classes in the Lecture Room, they were certainly dispelled by the success of this exhibition. Large numbers not only of photographs but of actual specimens, were shown on the screen, with a definition not inferior at least to that of the photographs, among them, sections of the entire kidneys of the cat, the ileum of man, various algae, mosses, etc. Dr. Hunt has also shown the circulation both in plants and animals on the screen. In fact, at present, Professor Meigs, of Jefferson, is using this very instrument in his lectures on physiology, with the greatest success.

Every one went away delighted beyond measure with the success of the undertaking, and its annual recurrence may be taken as an established fact.

Why should not your own Microscopical Society go and do likewise.

Yours, Truly,

K.

CALIFORNIA ACADEMY OF SCIENCES.

The members of the Academy of Natural Sciences met the 2d ult, at their Museum, on Clay street, Dr. Blake presiding.

A member presented some specimens of gold-bearing quartz from the newly discovered gold regions of San Diego.

Dr. Kellogg presented a specimen of the Lemon verbena (*eloysia citradora*), showing the growth attained by this plant in the vicinity of San Francisco. The specimen presented measured 21½ inches in circumference at a height of 6 inches above ground. It had grown in Alameda county, and the remainder had been sent to England.

Several books were received for the library of the Academy.

Professor Davidson offered a verbal communication in reference to some interesting observations which he had made while on the U. S. Coast Survey on the Southern Coast in the vicinity of San Buenaventura, of the peculiar and unusual effects of the sun's heat on the surface or face of a bluff of argillaceous sandstone, 70 feet high, with a southwest aspect, and on top of which his observatory was placed at a distance of about 12 feet from the edge. In the daytime, when the sun's heat was at its maximum, he found a variation in his level equal to 49 seconds of arc, the effect being also plainly discernable on objects at the foot of the bluff upon careful observation. Also its effect as perceptible in the determination of the azimuth, when he noticed a variation to 20 seconds. Professor Davidson stated that so far as the records went, of other observations situated in suitable localities for similar investigations, no such extensive effects had ever been noticed.

In connection with the late eclipse of the sun he mentioned that he had received a quantity of the photographs

of the phenomenon, taken at Shelbyville and Springfield. Photography had proved an invaluable adjunct in this connection, as giving them the only accurate medium, so far obtained, whereby the exact moment of the first and last contact could be ascertained. The plates from which the photographs shown were taken, had been exposed but the 50th part of a second. The finger which pressed upon the slide exposing the plate, by the same action noted the time upon a self-registering chronograph. Views were taken with the instruments every second immediately preceding the calculated moment of actual first or last contact and by registering the time of these and calculating the size of the disc projected upon the sun's surface with a micronometer, the actual moment of contact was definitely and accurately ascertained. The photographs some 50 in number, were exhibited by Professor Davidson. They were views of the eclipse at various moments, from the time of first contact until totality was reached, and then on until the last contact took place.

Prof. Davidson spoke of the state of the crops in the southern country from want of water. He did not know that it was within the province of the Academy, but he thought he could, with propriety, mention the facts. The crops this year then will be almost a total failure, the rainfall so far having been limited to two inches. The remedy, he thought, lay in digging artesian wells. He had visited a couple of farms where an abundant supply of water was discovered at a depth of 70 feet. This, he was confident, would be found the case over most portions of that part of the country known as the Los Angeles plains, where they were now suffering the most from the drought.

A member made mention of some observations he had made among the Sierra Nevada mountains during a recent trip. The ground, he found by actual observation, did not freeze at all during the winter beneath the snow. As some of the results of this he instanced the fact that the flowers spring up in spring almost immediately that the snowy covering is taken away, which they would never do were the ground frozen. Also that to this fact may be attributed the scarcity of land slides on the line of the Central Pacific Railroad.

Professor Davidson said that while at Los Angeles he had made an observation of a star being eclipsed by the moon, when he saw the star—a red one—projected on the light limb of the moon. Owing to its color he had been enabled to observe it, since white stars, he had observed, disappeared immediately upon contact. How it was he could not explain. The projection lasted 2½ seconds.

Professor Whitney said it could not be by refraction, since the existence of a lunar atmosphere had never been detected. The existence of an atmosphere would not account for the projection, but for the appearance of the star without contact after contact had actually taken place.

Prof. Davidson mentioned his observations to test the transmission of the force of motion by rock, made on the occasion of the late explosion in the bay.

Dr. Kellogg said, two gentlemen, friends of his, had found a piece of the coffer dam on Angel Island. It was torn and jagged, and about 15 feet long. They supposed it had been blown there, but he had no theory to offer as to how its presence on the island was to be accounted for.

Prof. Whitney presented a specimen of fossil tropical palm, discovered near Marysville in some tertiary deposit.

At the regular semi-monthly meeting of the Academy, on the 16th ult., Prof. Blake read a letter from A. Garrett, of Papete, Tahiti, accompanying and describing two boxes of valuable and curious objects of natural history, collected for and presented to the Academy. The writer said that after being for four years cut off from the civilized world, engaged the whole time in collecting specimens of Natural History, he had had the misfortune to lose, by shipwreck, his manuscripts, drawings, collections of dried plants and insects, portraits of native tribes, native curiosities and 50 volumes of scientific works. The boxes that he had sent contained 327 specimens of shells; also, lizards, snakes, crustacæ, bats, frogs, etc. The skull of a Vitian native, who had been eaten by cannibals, was also in the collection.

A peculiarly marked section of a meteoric stone, sliced from one of several found near together at Milwaukee, Wisconsin, was received from Dr. J. A. Lapham of that place.

Attention was called to the death of Dr. Veatch, a member of the Academy, and notices given of a memorial to be introduced hereafter.

Gregory Yale commented upon the subject of Indian mounds in California, and moved a field meeting for the investigation of one at the Potrero next Saturday. Carried, and members will meet at the Long Bridge at 10 A. M. of that day.

Dr. Cooper gave an interesting account of several small caves in Placer county, including the well known Alabaster Cave. No human or other animal remains have been found in any of these, but may be hereafter, when they are examined carefully. One cave described, contains three chambers of about 40, 20 and 12 feet square, or round, respectively, which was used as a dance house by the miners 20 years ago. In one of these caves he saw a bunch of bats clinging in one mass, at which he fired his pistol killing twenty at one shot.

Mr. Yale accounted for the presence of human remains in the caves of Kentucky and Europe and their absence in those of California, by the dryness of the former and the dampness of the latter.

CALIFORNIA PHARMACEUTICAL SOCIETY.

Secretary's report of the 13th meeting held on the evening of the 9th of May. The meeting opened at 8 o'clock P M., Mr. Simpson in the chair. The minutes of previous meeting were read and approved. Five members were elected, their names having been presented by the executive committee.

The Secretary read a letter from Messrs. Redington, Hostetter & Co., enclosing a check for fifty dollars to be devoted to the purchase of various publications for the use of the Society. A letter was also submitted to the meeting, from the Board of Trustees of the Maryland College of Pharmacy, requesting delegates from the California Pharmaceutical Society, to a convention to be held in Baltimore in September, 1870, for the purpose of determining upon the best uniform course of study for those learning the profession of pharmacy, etc. The Secretary was directed to reply to these and other letters, the correspondence to be placed on file.

Mr. Steele exhibited samples of *Solution Per-chloride of Iron, Tincture Muriate of Iron*, and crystalline iron chloride, made from four different formulas. The difference in the formulas and the results obtained was explained, and preference given to the various formulas of the United States Pharmacopœia.

JAMES G. STEELE, Secretary.

BIBLIOGRAPHICAL NOTICES.

Clinical Lectures on the Principles and Practice of Medicine. By John Hughes Bennett, M. D., F. R. S. E., Professor of the Institutes and of Clinical Medicine in the University of Edinburgh, etc. Fifth American from the Fourth London Edition. New York: William Wood & Company; San Francisco: A. Roman & Co.

To review adequately the labors of John Hughes Bennett, as presented to us in this volume, would be somewhat beyond the limits of our space and opportunity, but we cannot pass by with a mere cursory notice, the work of a man who has played so conspicuous a part in the history and progress of medical practice for the last thirty years. There are few greater and more painstaking investigators living than Bennett, and fewer still if any, who have more successfully carried the genius of modern research—the vast advantages derived from Pathology, Histology and Therapeutics, with all the collateral sciences—to the patient's bed-side.

After an introduction singularly felicitous, come chapters of uncommon merit and brevity on the examination and the value of modern scientific instruments, as aids to diagnosis. It is unnecessary to dwell on the importance of the Pleximetre, Laryngoscope and Microscope, for the correct differentiation of symptoms in the present advanced state of medical diagnosis, and if any of our readers be skeptical of their utility—as some of the old school are, we have reason to know—we refer them with great pleasure to the succinct yet lucid remarks of Bennett on those instruments. We can safely recommend his excellent chapter on Percussion and Auscultation as eminently practical, brief and full, differing happily in more respects than one from a "masterpiece" in the shape of a monograph on these subjects, which has recently been placed in our hands. There is certainly no mechanical appliance which has advanced the scientific course on which practical medicine is now entering, so much as the microscope, yet we doubt if this instrument as yet, is at all as much or as generally used for clinical purposes as its value would warrant. Gentlemen of mental qualities so essentially "practical" as never to seek in the least resources from pure science for all their purposes, are too much given to decry scientific appliances at the patient's bed-side as "medical toys." To such we should commend the following extracts from Bennett's chapter on the microscope.

"Some years ago I was summoned to see a Dispensary patient laboring under bronchitis, who was spitting florid blood. On examining the sputum with a microscope, I found that the colored blood corpuscles were those of a bird. On my telling her she had mixed a bird's blood with the expectoration, her astonishment was unbounded and she confessed that she had done so for the purpose of imposition.

"A boy was brought to me with an eruption on the scalp, which was of so indefinite a character, that its nature could not be determined. He had lately been elected to occupy a vacancy in one of our educational charitable establishments, and the question to decide was, whether the disease was or was not contagious. On examining the scalp with a microscope, I readily discovered the *Achorion Schoenlenci*, or fungus constituting true favus, and as this has been experimentally proved to be inoculable, I had no hesitation in preventing his admission into the school.

"A child was brought to me said to be affected with worms, because it passed yellow shreds in abundance, which to the naked eye, closely resembled ascarides. All kinds of vermifuge remedies had been tried in vain. On examining the shreds with a microscope, I found them to consist of undigested spinal vessels of plants, and they ceased to appear when the vegetable broth used as food was abandoned.

"An individual was supposed to be laboring under dysentery, from the frequent passage of yellowish pulpy masses in the stools accompanied with tormina and other symptoms. On examining these masses with the microscope, I found them to consist of undigested potato skins. On inquiry it was found that this person had eaten the skins with the potatoes. On causing these to be removed before dinner, the alarming appearance ceased and the other symptoms also disappeared.

"An elderly lady conceived herself to be affected with insects continually forming on the skin, which produced incessant itching and tingling. All the hair was removed, and every kind of application was tried without effect. On rubbing the surface she always saw minute white rolls and black specks, which she regarded as insects in different stages of development. The torment and anxiety this caused her for many months it is scarcely possible to conceive. At length she labored under the idea that she was communicating the disease to her husband and daughter, when at the request of her medical attendant in the west of Scotland, she came to Edinburgh in order that I might investigate and treat it. I had the pleasure of showing this lady under the microscope, that the white bodies were minute rolls of epidermis or of the cotton cloth with which she rubbed the skin, and that the black specks were portions of dust or soot. Her hallucination being in this way dissipated, she returned home perfectly well.

"A child had been suffering for four years from copious and fœtid discharge from the nostrils, accompanied with great pain. At the end of that time, a dark brown and indurated mass was discharged, about an inch long, and a quarter of an inch broad, closely resembling a sequestrum of bone. This mass I was requested to examine microscopically by Dr. Littlejohn, under whose care the patient was, and from its structure I readily deter-

mined that it consisted of some fire-wood. When this was known, the parents remembered that about the time the disease commenced, alterations were made in the house, and that the children used to play with the wood shavings. There could be little doubt that a piece of shaving had been thrust up the nose, and been the cause of all the trouble."

These we think are plain instances of the value of the microscope in diagnosis, and have the additional merit of requiring no high powers, or no special training for their elucidation.

In his chapter on the molecular and cell theories of organization, the author carefully considers the views of Schwan, Goodsir and Huxley, and advances objections quite subversive of each, while at the same time, he adduces very reasonable evidence in favor of his own theory, or the molecular, which he first brought under the notice of the British Medical Association, in 1855, and which to us unquestionably seems the only theory of organization likely to answer all the conditions of development. His chapter on Inflammation, though evidently the result of original investigation and much study, and written with his usual clear method and ability, seems however, to lean too much towards the support of his favorite pathological views, and we doubt very much if he will find many to agree with him in the assertion that inflammation is unequivocally characterized by exudation of the liquor sanguinis; or as he puts it, that inflammation *is* exudation of the liquor sanguinis. On this subject we have no hesitation in expressing our preference for the beautiful unrivalled generalizations of Simon. In his chapter on Tuberculosis, we are somewhat surprised to see no mention of the recent researches of Sanderson and Wilson Fox, and again in the article on Degeneration, we miss the vigorous reasoning and experimental researches of Simon. There can be no doubt however, that the general pathology of his work, for all practical purposes, is extremely sound and very much in advance of most modern works on practice of medicine. But it is in his Therapeutics that Bennett is happiest.

Few men have had larger opportunity of observing the action of drugs by the patient's bed-side, and as a consequence, he deals not sparingly with the theorists on the action of drugs. He quotes freely from the work of Headland, one of the most recent and approved works on materia medica, and successfully refutes the current ideas as to the action of mercury, antimony, conium, strychnia and opium. Of this latter he says: "At page 425, (Headland's work) it is said: 'In delirium tremens and in all cases of delirium unattended with high fever, opium may be said to be our sole reliance.' Our sole reliance! why gentlemen, during this summer season of three months, (1864) you have seen no less than twenty cases of delirium tremens enter my wards, some of them very severe, and yet they have all got perfectly well without the use of opium in any way. Nay more, I will venture to say that this favorable result is in great part attributable to no opium having been administered." After referring to the opinions of Bichat and Majendio, as to the current knowledge of therapeutics in their time, he tells us very truly: "That most medical practitioners are educated in a blind faith as to the properties and uses of drugs, a faith which has in most cases, descended to us from a barbarous age, has become traditional, and possesses no relation to the present state of medical science. All those who have acquainted themselves in recent times with what is known of the structure and chemical composition of the tissues, the laws of nutrition, and the pathological changes which occur in organs during disease, must feel astonished at the unfounded assumptions, want of evidence, and even unreasonableness which characterize writings on the action of medicines." We dwell specially on this wholesome skepticism as to the action of drugs, for in this country especially, our periodicals are overburthened with general rules as to the value of this or that drug—a generalization very often arising from the experience of a single case.

We cannot enter into anything like satisfactory detail in discussing the merits of the sections of the diseases of the particular organs, but we should like to see the Section on Nervous Disease more full at the hands of so able an observer as Bennett, whose authority would be of no small value in the present craving for information in this class of maladies. The pathology of ulcer of the stomach is scarcely touched on, but the diagnosis is admirably and concisely given. The Diseases of the Liver, though very admirably separated as regards their morbid anatomy, may in our opinion, be more clearly differentiated in the living subject. The sections on thoracic diseases are unquestionably the best in the whole work. The general rules for diagnosis at the heading of each division cannot fail to to be of immense value to the most experienced, and invaluable to the tyro at the bed-side.

So far we have merely referred to the few trifling sins of omission, of which in our opinion the author is guilty, but our greatest surprise is that the omissions are so few in a work of such extensive range, embracing as it does, the diseases of all the organs. In conclusion we would remark, that though we do not quite agree with the author in his views of the parasitic nature of Diphtheria, or of the

pathogeny of Emphysema, we know of no one work on Practice of Medicine, more essentially practical and instructive throughout, or none more calculated to advance scientific clinical work.

A Practical Treatise on the Diseases of Children, by J. Forsyth Meigs, M. D., one of the physicians to the Pennsylvania Hospital; consulting physician to the Children's Hospital, etc., and William Pepper, M. D., Lecturer on Morbid Anatomy at the University of Pennsylvania etc.; fourth edition. Philadelphia: Lindsay & Blakiston; San Francisco: A Roman & Co.

In giving a new edition of this work to the profession, Dr. Meigs has spared no spains to bring it up to the times, and to render it as popular and important a text-book for the student and practitioner of to-day as it once was for the those of the past. So many chapters required reconstruction so many changes involved in the task, and so much material to be added, that Dr. Meigs very wisely secured the assistance of Dr. William Pepper, so that altogether we have almost a new book. While the authors have greatly enlarged the chapters on croup, convulsions, tracheotomy, and others, they have not forgotten what is to apt to be forgotten by revisers, viz: to omit such material as our present knowledge has shown to be no longer required. Of new material there are about seventeen new articles, including all the subjects the omission of which proved to be a defect in the old edition. The general plan of the original work, however, has been preserved, from the fact that the authors found it difficult to substitute a better one. The great change in the treatment constitutes the most important feature of the new edition. Calomel, which is perhaps oftener recommended than necessary is not so indiscriminately prescribed as in the previous edition. We are rather surprised, however, that venesection should be recommended as a rule in acute pleurisy.

In recommending stimulants freely, in cases of debility from nearly all causes, we are sure will give satisfaction to all who follow the practice. Debilitated children bear stimulants well, and as a general rule require more than they get.

The work is written in a very easy, pleasant style, and published in a handsome volume of 921 pages. We may safely say, that the practitioner who is called daily to treat little sufferers, cannot afford to do without this work. As a rule, the doctor who buys and reads the new books as they come out and subscribes to a number of good journals, finds it a good investment.

On the Physical Basis of Life. By T. H. Huxley, L. L. D., F. R. S. New Haven, (Conn.,): Charles Chatfield; pp. 35.

Originally this was a discourse delivered by the author in Edinburgh, 1868, and was afterwards published in the *Fortnightly Review*, London. It now appears in pamphlet form as a reprint, and is the first of a series of scientific and educational essays and lectures which is to be published under the name of the "*University Series.*" Prof. Huxley may be justly called one of the first of living naturalists, and one of the ablest English advocates of Darwin's theory of the origin of species. Whatever may be thought of his theories, one thing is certain, viz.: as a purely philosophical writer there is scarcely a living man, perhaps, whose discusssions are more eagerly sought for by the scientific men of America and Europe.

We are aware that many look upon this new philosophy of organic life as savoring of materialism; especially is this the case with those who have not thoroughly mastered the author's views. In reference to this he says: "This union of materialistic terminology with the repudiation of materialistic philosophy I share with some of the most thoughtful men with whom I am acquainted. And, when I first undertook to deliver the present discourse, it appeared to me to be a fitting opportunity to explain how such an union is not only consistent with, but necessitated by sound logic. I proposed to lead you through the territory of vital phenomena to the materialistic slough in which you find yourself now plunged, and then to point out to you the sole path by which, in my judgment, extrication is possible."

He believes organic life or living matter to be mineral matter under the influence of cell-action, and that there is some one kind of matter common to all living beings. And this common matter he calls protoplasim. "Protoplasim, simple or nucleated, is the formal basis of all life. It is the clay of the potter; which, bake it and paint it as he will, remains clay, separated by artifice, and not by nature, from the commonest brick or sun-dried clod.

Animal cells are sustained by the consumption of matter previously organized by cell actions, while the vegetable cell of itself transforms mineral into organized matter. In as much as all cell action produces or is attended by waste and growth of material, and the brain being composed of cells, and is the organ which manifests intellect, it follows that the manifestation of thought depends upon cell action, and causes waste and growth of matter. But the sum of the whole matter is, that life in its minute cell is as mysterious as it is in the complex organic beings which surround us, and the Great Originating power as essential to the one as to the other.

California Medical Gazette.

SAN FRANCISCO, JUNE, 1870.

☞ *All Letters and Communications to be addressed to the "Editors California Medical Gazette, care of A. Roman & Co., San Francisco."*

AMERICAN MEDICAL ASSOCIATION.

We give the report of the proceedings of the National Medical Association, held in May last, at the National Capitol, as given in the New York *Medical Gazette.*

Twenty-one years ago this Association was organized with the best wishes and highest hopes of the medical profession. What has it done in all that time? Year by year it has dwindled until the hopes of its founders have ended in shame and humiliation. No subject of higher consideration than the fee that should be charged for examination for life insurance companies, or the color of the skin requisite to membership to medical societies was definitely settled.

The proceedings upon the whole would do credit to some Trades' Union Convention, and its objects seem to have been no higher. If the profession at large has been deteriorating as fast as this national association during the same time, may God have mercy on us!

The Association did agree upon one other thing which fills us with apprehension. It resolved, upon the solicitation of some physician, who was at Washington on some lobby business connected with a hospital contract, who it seems had credentials sent to him by the so-called San Francisco Medical Society, to invite them—to meet next year in this city.

We shall be glad to see them, we will show them the Seal Rock, Woodward's Gardens, our magnificent and unique City and County Hospital, and do the best we can to make their stay as pleasant as possible. The San Francisco Medical Society will furnish a steamer to take them about our beautiful harbor. The President of the San Francisco Medical Society, will be delighted to take them to Yosemite Valley; his overflowing wine cellars will make their hearts glad; but we hope the "nigger question" will not be raised here, for we are not all white. Some Caucasian physicians too, do attend African patients, and the question might be raised—but we will not borrow trouble, "sufficient for the day is the evil thereof."

To those who have read the published reports of the proceedings of the late session of the American Medical Association, no words of ours could more vividly picture the degrading position in which that body has placed our profession before the eyes of the community. We would fain, if it were possible, keep the shame a secret; but the busy tongues of the daily press have babbled it verbatim by the column, to the thousand-eared public, and it is well that those who know our disgrace should know, also, that there are some among among us who blush for it.—*Med. Gazette, N. Y.*

AN INJUSTICE TO CHILDREN.

That formal parties for children are becoming more and more part of our social system is to be regretted. We say formal parties, for we are not of those who would deprive children of their rollicking afternoon and early evening gatherings, whose distinguishing features are fun, frolick, plain food, and warm clothing. But as journalists, we cannot see an institution creeping into our social system that is to prey upon the physical and moral health of our young men and women, without raising our voice in protest against its adoption. Parents can perpetrate no greater injustice upon their children, than to permit them to attend a *formal, fashionable, childrens' party.*

The moral aspect of the question we leave to the consideration of those to whom the duty belongs, so will confine our remarks to their physical consequences. And it is only necessary to consider the features of one of these foolish affairs, to be convinced that their consequences must prove destructive and disastrous to the physical health of the child.

A formal invitation, probably a week previous to the occasion, consequently a whole week's excitement, which is neither conducive to the child's intellectual or physical progress. At length the day arrives, and a long, long day it proves, until at about the child's proper bed-time, having eaten scarcely anything all day, it is absurdly and insufficiently dressed and sent away to spend a greater part of the night in an over-crowded and heated atmosphere. At a late hour, exhausted and hungry, they eat and drink like children, but of food that would necessitate, for the inured stomach, brandy and water or the best of punch to digest. Thus are children being forced prematurely into manhood and womanhood, and like a hot-house plant without the physical stamina to endure the slighest storm. Are childrens' parties a necessity of our advanced state of civilization, then let us recede on the social scale within the limits of health, even back to the social position when children actually received corporeal punishment in school. Almost any, in fact of the past abuses are preferable to this one. But for our part we are of those who believe that the highest civilization will harmonize

with the moral and physical laws, will be characterized by the simplicity, grace, beauty and freedom of nature; will be satisfied that childrens' food, clothing and enjoyments be adapted to their tender years.

NAVAL RANK.

Enterprising politicians, wishing to increase the number of political appointments, are assisting the line officers, in their endeavors to destroy the present admirable system of competitive examinations for position on the medical staff of the navy. Now the young man who wishes to join the medical corps of the navy, knows that the only road is through individual merit and scientific attainments.

The miserable pretext of those politicians, is that examining boards are determined not to fill the vacancies in the medical department of the navy, until Congress grant them the rank which they claim. While the fact is, that meritorious men are not going to place themselves in the contemptible position to which the present regulation assigns them, therefore examining boards have no opportunity of rejecting good men.

The bills pending before both Houses of Congress, propose to do away entirely with competitive examinations, and make any graduate of any college a proper person to look after the health of the sailors of the United States Navy.

That these high-toned gentlemen of the line, so superior to the medical corps, by birth, education and culture, should object to *medico* possessing rank we are not surprised. But if meritorious medical men will not enter the navy without rank, were it not better for the line to tolerate them as a necessary evil, than to ship at random such sorry specimens of the healing art, as politicians will be likely to supply.

Toland College.—Owing to a misunderstanding in the Faculty, the merits of which we know nothing, Professors Morse, Gibbons, Lane and Price have resigned their chairs. We understand that these gentlemen are to reorganize the medical department of the University of the Pacific. There is no necessity for two medical schools on this coast, and we hope the students will have the good sense to carefully investigate the merits of the quarrel in the Faculty, and support by their united presence the gentlemen whom they consider in the right. If the students make the great mistake to divide, they will but prolong a struggle productive of no good, and which must sooner or later, end in the suspension of our school. We earnestly urge the student to support unanimously, one or other of the schools.

DR. HORACE WELLS AS THE DISCOVERER OF ANÆSTHESIA.

According to the *American Journal of Dental Science*, the Dental Association of Hartford, Conn., are about to erect in that city, a monument to the memory of Dr. Horace Wells, "in honor of the great discovery which has conferred such blessings on suffering humanity."

While Boston claims this honor for Drs. Jackson and Morton, it seems a little singular that in erecting a monument in that city to the memory of the discoverers, the names of the discoverers are not mentioned. Anæsthesia like many other great discoveries, was probably the result of the development of observations and suggestions of many rather than the great discovery of any one mind. Great discoveries are frequently forced upon the mind by the development of knowledge, or the accumulation of facts. There are discoveries made in our age, which to leave undiscovered, would be a sin of omission, while to have made the discoveries an age earlier, would have been an impossibility. The American Medical Association, however, at its recent meeting, took this matter of discovery in hand and resolved that Dr. Horace Wells be declared the original discoverer of anæsthesia, and of course, the matter is settled. If the Association does not know, who does?

REMOVAL OF KIDNEY.

In the April number of this *Gazette*, we mentioned that Professor G. Simon, of Heidelberg, had recently successfully removed a kidney from a woman, but were not aware at the time with what result. A few days ago we received a letter from Dr. Knapp of New York, saying that the woman was alive and well, and that Prof. Simon was preparing a detailed account of the case.

In the death of Sir James Y. Simpson, medical science has sustained a severe loss. For thirty years he has figured conspicuously as a progressive spirit, in nearly every branch of medical literature. It seldom happens to a medical man to receive such honors during his lifetime. Socially he was extremely popular with the people of Edinburgh. His death will be mourned by thousands.

Dr. Letterman's friends will be sorry to learn that he has not made a very rapid recovery from his fractured leg. The confinement told pretty severely on his constitution. At present he is in the country, and we are glad to hear that he is improving, and are in hopes soon to see him, himself again.

WESTERN SOCIAL SCIENCE ASSOCIATION.

The second meeting of the Western Social Science Association, (organized at Chicago, Nov. 11th, 1868,) will be held in Chicago, June 8th and 9th, 1870.

Valuable papers will be read, on this occasion, on the subjects of Finance, Education, Jurisprudence, Crime, Pauperism, Deaf Mutes, Idiocy, Insanity, Criminal Abortion, Public Charities and other allied topics.

The co-operation of nearly all the officials of State Institutions in the West, also of many college professors and other men of equal eminence and ability in other walks of life, has been secured.

The Association will also hold a special meeting at some time during the summer, in Indianapolis, under the auspices of the State authorities, when the question will be discussed: "What is the duty of Indiana to her neglected insane and idiotic population?"

The names of all persons likely to take an interest in this organization should be sent, also all offers of papers to be read or published, should be addressed to

Fred H. Wines,
Corresponding Secretary,
Springfield, Illinois.

The list of the Flora, by H. N. Bolander, that has appeared in the late numbers of this *Gazette*, being now completed, the publishers have issued about one hundred copies in the form of a monograph of about fifty pages, which can be had of A. Roman & Co,, at $1.00 a copy.

☞*Readers of the* California Medical Gazette *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received and acknowledged under "Communications received."*

MISCELLANEOUS.

THE TWENTY-FIRST ANNUAL CONVENTION OF THE AMERICAN MEDICAL ASSOCIATION.

[Held at Washington, D. C., May 7th, 1870.]

Although the American Medical Association may figuratively be stated to have "come of age" on the occasion of its just-completed anniversary, it would be beyond the bounds of "legal fiction," to say that it has attained "years of discretion." On the contrary, one might imagine that its corporate vitality being limited by a briefer space than that of individual human life, it had missed its prime and fallen into a condition of premature senile dementia. Little talent for vaticination is needed to foretell that some of the discussions during the past few days will for years to come be used by the press and by the public at large to ridicule and reproach the medical profession.

The Association assembled in Lincoln Hall, and was called to order by the President, Dr. Geo. Mendenhall, on Tuesday last at 11 A. M., Drs. F. G. Smith, L. A. Sayre, Warren Stone, J. S. Moore, Vice Presidents, and those of the ex-presidents of the Association who were present, occupying seats on the stage. About three hundred delegates were present.

The Rev. Dr. C. B. Boynton opened the proceedings with prayer, not anticipating how soon the Convention would show itself to be past praying for, and was followed by Dr. Antisell, Chairman of the Committee of Arrangements, who made an address of welcome, congratulating the Association on the large attendance, and especially on the full representation from the reunited Southern States. He was illogically sanguine enough to hope that much good would be accomplished on account of (he did not say in spite of) the varied interests represented. The following strictly scientific evening programme was then announced:

Tuesday.—Reception by the President of the United States, at 8 P. M. (An exceedingly gratifying festivity for the members from South Carolina, Kentucky, Maryland, and a few other places that might be named.)

Wednesday.—Reception by the Surgeon-General at the Army Medical Museum, from 7 to 10 P. M.; Surgical Lecture in lower hall at 8 P. M.; Microscopical Lecture at 8.45 P. M.

Thursday—Illumination of the Capitol Dome at 8 P. M.; reception by Mayor Bowen, of Washington, at 9 P. M. The roll of membership was then called.

The Permanent Disgrace of the Association was then submitted in the shape of a majority report from the Committee on Credentials, excluding the delegates from the National Medical Society of the District of Columbia, the American Academy of Medicine, D. C., Howard University Medical College, the three hospitals of the city, and the Alumni Association of the Medical Department of Georgetown College; the last because it was held that the Association in question was entitled to but one representative; the others on the ground that they practised or permitted professional intercourse with colored practitioners. Some twenty-five delegates are thus tabooed, including three colored physicians, one of whom is said to be a graduate of Queen's College, Montreal, and another to hold his degree from the University of Paris. [Your Correspondent may be permitted parenthetically to remark that, although he has been condemned for "ultra-southern" political views, he should be inclined, irrespective of color, to consider a diploma from an English or French college as a more certain guarantee of educational attainments than one from most of the institutions which "rule the roast" in the American Medical Association.]

Dr. Robert Rayburn retaliated upon his melanophobic fellow Committee-men by presenting a minority report adverse to the admission of the delegates from the Medical Society of the District of Columbia, on the score that this Society is "irregular" and in the habit of violating the Code of Ethics, and further protesting that the "so-called Medical Association" of the District is in no sense "a medical organization entitled to representation in the American Medical Association," but simply "an ingenious device by which the Medical Society of the District of Columbia is enabled to duplicate its number of delegates." He therefore recommended that the thirty-five delegates from these two organizations should be excluded, and reported favorably upon the credentials of the majority's victims to the number of twenty-eight, concluding with a protest against "the arbitary and illegal conduct of the majority of the members composing the Committee on Credentials, in refusing credentials to delegates from medical institutions which have been heretofore

represented in the American Medical Association, and apparently objecting to them solely on partisan and political grounds." This report was introduced by a few remarks, characterized by more truth than poetry, to the effect that the Committee had resolved itself into a Caucasian Caucus, and more would probably have followed had not Dr. N. S. Davis made the point of order that the report should be offered without comment, which was agreed to, and the report was referred to the Committee on Ethics, as was also a protest by Dr. Stewart of Washington.

Dr. Busey, D. C., then offered another protest, signed by several physicians, against the admission of the representative from Maryland, Dr. C. C. Cox, who was alleged to have given up the practice of medicine. Dr. Cox would have replied, but Dr. Davis again interposed a point of order, and another feather was laid on the back of the Committee on Ethics.

Dr. Martin of Massachusetts, showed that rampant disloyalty had imperilled the foundations of our government in the rejection of a large portion of his delegation, and moved that this, too, be referred to the Committee on Ethics.

As matters thus far seemed to indicate that nearly every member present had a grievance, and as the hearing and discussion of two or three hundred individual grievances, in retail, would occupy rather more time than the Association could conveniently spare, Dr. Davis moved that all questions of admission relating to institutions, hospitals, colleges, or private persons, be consigned at wholesale rates, to the Committee on Ethics, and that the meeting proceed to the regular order of business.

As the first piece of really important business, Dr. Sayre, called the attention of the convention to the fact, that in retun for some stones which he had thrown from his glass house, Dr. Ruppaner had mischievously thrown back an injurious missile in pamphlet form. Perhaps out of consideration for the already overburdened Committee on Ethics, perhaps because this seemed an affair of more gravity than ordinary professional ethics were competent to meet, Dr. Sayre suggested that it be referred to a special committee; but on motion by Dr. Davis, (who certainly could not have done all his moving on the First of May,) a new Committee on Ethics was appointed, to whom this with all other matters was relegated; said Committee consisting of Drs. Alfred Stille, Pa.; N. S. Davis, Ill.; J. N. Keller, Ky.; H. Askew, Del.; J. J. Woodward, U. S. A.

President Mendenhall then delivered an address, a full report of which I forward herewith, in which the purposes for which the Association was originally established—namely, the promotion of unity of sentiment, concert of action, and friendly intercourse in the profession, and the elevation of the standard of medical education,—were set forth,and the immense achievement of framing "a written law" of medical ethics (which by a stretch of imagination was said to have resulted in "a great improvement in professional morals") was lauded in set form. A wise suggestion was made that the sessions of the Associations should be prolonged, and that the sections should be allowed longer time for their meetings under more permanent and distinct organizations than at present. The questions of educational reform, surgical patents, alcoholic stimulants, etc., were discussed, some wisely, others otherwisely.

Reports of Committees were presented on the Cultivation of the Cinchona Tree; the Cryptogamic Origin of Disease; Physical and Vital Forces; Variola; Relative Advantages of Syme's and Pirogoff's Amputation at Ankle; a National Medical School; Commissioners to aid in Trials involving Scientific Testimony; Climatology and Epidemics; Veterinary Colleges; Medical Ethics; Necrology; State Societies; Nomenclature of diseases; Medical Education; Medical Literature; Prize Essays.

Dr. Antisell read a paper on the importance of caring for the health of domestic animals, which was fortunately referred to the Committee on Publication, inasmuch as the acoustic defects of Lincoln Hall rendered it, in common with most of the proceedings, inaudible to a majority of the persons present.

A recess for the appointment of a nominating committee for officers of the Association, resulted in the appointment of Drs. Stille, Nottingham, Askew, Carpenter, Busey, Murphy, Carleton, Jenks, Rea, Michel, Lankford, Talley, Manlone, Atlee, Bemiss, Keller, Cockrell, C. A. Lee, Palmer, Haywood, McGregor, Nance, Haxall, Bullock, Barber, Stuart, Creeg, Steinriede, Brock.

Dr. Cox moved that Dr. Busey's name be stricken out until the Committee on Ethics should settle the District difficulty, whereupon Dr. B. reported that Dr. C. was not a delegate from Maryland at all. A tedious amount of discussion ensuing, it was proposed that the rival factions from the District of Columbia should go to some convenient place and fight out their differences, like the Kilkenny cats. A motion to adjourn, however, prevented this devoutly-to-be-wished consummation, and the members retired to smooth their ruffled feathers in preparation for the White House soiree, or such other relaxation as to each might prove congenial. Thus the morning and the evening were the first day.

SECOND DAY.

The Convention was called to order at 9.30 A. M.

Dr. Gross moved that a supper at the close of the third day's session be made an annual feature of the transactions of the Association, each member to pay his share of the expense, and a committee was appointed to make arrangements for that purpose.

Dr. Stille, from the Committee on Ethics, made a partial and impartial report relating to the reports against certain delegates from Massachusetts, recommending the Medical Society of that State to purge itself of irregular practitioners and to live virtuously according to the letter of the Code of Ethics.

The Secretary read a protest against the admission of Dr. C. C. Cox, which was referred to the Committee on Ethics.

Dr. Cox, after much confusion and noise, was allowed five minutes for explanation, and intimated that somehow or other, in the confusion between the Medical Society and the Medical Association of the District of Columbia, he had paid his money without being permitted to take his choice in the matter of a license; the market price of that article having been disbursed by him, but the documentary equivalent not having been delivered to him as per contract. He further indignantly denied the imputation cast upon him of having corrupted good manners by evil communications with Mr. Sumner or any other Congressman.

Dr. Palmer, D. C., also would have liked to explain something, but Mr. Davis and the Association generally, objected to listening to anything of the sort.

Dr. Mussey, Ohio, proposed that the Committee on Ethics be forthwith condemned to perpetual imprisonment by a direction that it sit until it could agree upon a report concerning disputed admissions. Dr. Davis, however, argued

rationally that inasmuch as the Committee had spent the whole of yesterday without deciding upon anything, it was preposterous for any one who believed in the immortality of the soul to attempt to place finite limits of time to its deliberations.

Dr. Loomis moved that all the Washington delegates be admitted until the Committee on Ethics should have rendered its report. He himself was excluded because he was connected with a college that graduated negroes. Objection was made to Dr. Loomis or any one from the D. C., speaking or voting on the subject until after it had been definitely settled, and his motion was lost.

Dr. Cox then moved that, on the contrary, no delegates from the District be admitted until the Committee report; which was carried.

Dr. D. W. Yandell, Ky., proposed the very liberal compromise of blotting the District of Columbia out of the map of the Association altogether; but on motion of Dr. White, N. Y., this ingenious mode of terminating the difficulty was tabled, and modern geography left undisturbed.

Dr. Smith, Pa., presented a report from the Committee on Publication for the past year, which was accepted, and an utterly useless and extravagant suggestion appended that all matter hereafter published be stereotyped.

Dr. Gross offered as an amendment that the transactions of the Association be published in monthly instalments in some medical periodical (an advertisement for which some journals would pay handsomely, though Dr. Gross did'nt say so) which motion was referred to a special Committee.

Dr. Antisell ventilated a little personal grievance against the Washington *Chronicle*, which had accused him of insulting the bearers of Washingtonian Credentials. No action taken.

Dr. Davis moved that no papers be circulated in the Association without permission of the President. Carried.

Dr. Robert Rayburn, Chairman of the Library Committee, (but anomalously excluded as a delegate) presented a report which was referred to the Committee on publication.

Dr. Burch, N. Y., moved that the vote on Dr. Gross's motion for a supper be reconsidered, whereupon it was resolved that the said motion should be laid on the table, and that the supper should not be laid on the table.

Dr. Moore, Mo., offered the inevitable resolution that an uniform scale of fees be fixed for all medical colleges, adding a few observations the reverse of complimentary to some Western institutions.

Dr. Davis sensibly advised the adoption of a fixed standard of education rather than a fixed scale of prices.

Dr. Moore explained that he only wished to force competition up to a minimum price. Medical teachers, in other words, like journeymen bricklayers, should "strike" for the lowest rate of wages, but be left at liberty to take as much more as they could get.

Dr. McNaughton, Albany, cogently opposed the introduction of such a trades-union element in medical education.

At the suggestion of Dr. Selden, Ohio, $100 was named as the minimum college fee, and it was moved not only that cheaper colleges be denied recognition by the Association, but that the alumni of such colleges be also placed under the ban. [The latter amendment indicates the comparative value of intellectual attainments and of dollars and cents in the estimation of some members of the Association.]

Dr. Yandell opposed fixed prices. He also opposed Latin and Greek; [it is evident that a man may commit to memory the terms "pachydermatocele," or "levator labii superioris alæque nasi;" without having the remotest idea of their meaning,] and after considerable discussion, the whole matter of fees and standards of education was laid on the table.

Nothing having been decided, Dr. Sullivan, Mass., moved that the decisions of the Association be declared binding for five years from date. Laid on the table.

Dr. Johnson, Mo., made another effort to fix the fees of colleges, forasmuch as the colleges either could'nt or would'nt take any steps in the matter themselves. This, too, was tabled, and the medical education question thus left to another quiet nap, to be momentarily awakened again this time next year.

Dr. Collins, Mass., moved that the fees for medical examinations for Life Assurance, be not less than $5. Carried. [And German societies will be examined in wholesale lots for two dollars a head to the end of time, or to the end of some Insurance Companies—which may happen somewhat sooner.]

A motion by Dr. Horner, Va., to regulate physicians' fees generally, was lost.

On motion by Dr. Sullivan, it was resolved that the Association have power to control medical education throughout the United States. [And the only wonder is that some one did'nt move an amendment extending the jurisdiction to the Sandwich Islands or the planet Mars, which would have been to all intents and purposes, equally efficacious.

Dr. O'Donnelly, Md., planted an oasis of usefulness in the Sahara of barren palaver by moving the appointment of a committee to devise means for the suppression of criminal abortion. Carried.

The Committee on Nominations report the following ticket for the ensuing year.

President—Alfred Stille, Pa.

Vice-Presidents—J. S. Wetherly, Ala.; Henry Gibbons, Cal,; J. T. Hurd, Texas; Samuel Willey, Minn.

Assistant Secretary—Dr. J. C. Tucker, Cal.

Treasurer Dr. Casper Wister, Pa.

Librarian—Dr. F. A. Ashford, D. C.

Committee of Arrangements—Chairman, Dr. A. N. Sawyer; Drs. J. C. Tucker, Shurtleff, Holman; Murray, U. S. Army; Simmons, Cal.; Carpenter, Oregon; Morrison, Nevada.

Committee on Publication—Drs. F. G. Smith, Pa.; W. B. Atkinson, Pa.; J. C. Tucker, Cal.; F. A. Ashford, D. C.; Caspar Wister, Pa.; H. F. Askew, Del.; Wm. Mayberry, Pa.

Committee on Prize Essays—T. M. Logan, Cal., Chairman; H. Gibbons, H. H. Toland, Beverly Cole, Cooper Lane, Cal.

Place of meeting—San Francisco, Cal.

Time of Meeting—First Tuesday in May, 1871, at 11 a. m.

Which report was adopted.

Various communications were read and referred to the appropriate committees.

Dr. Maddox, Balt., inquired what arrangements had been made touching seats for the cherubs of the District, and on being informed by the Chair that they were all excluded, moved a reconsideration of the whole matter; but out of consideration for the Committee on Ethics, reconsideration was not agreed to.

Amendments to the Constitution were next in order (barring anything like the "Fifteenth") and a sufficient supply was on hand to meet all demands.

A liberal and disinterested motion was here offered that all

delegates from medical colleges, hospitals, lunatic asylums, and the American profession resident in Paris, be excluded from the Association, reserving seats only for representatives of societies in regular standing; and as a further amendment it was proposed that members by invitation be also expurgated; but after some debate the table was doomed to groan under both weighty propositions.

Dr. Stille, from the Committee on Ethics, submitted a report in the case of Dr. C. C. Cox, advising the admission of that gentleman, as the charges against him were too vague to be acted on.

As a matter or course, an opposing minority report was presented by Dr. Keller, Ky., advising that Dr. Cox be not admitted to represent Maryland, since he lived in Washington. The majority report was, however finally adopted.

Various papers were referred to the different sections, after which the Association adjourned.

An exceedingly interesting evening was spent in a visit to the Army Medical Museum and listening to lectures by Dr. Otis on the resection of joints, and by Dr. Woodward on electric lights, who let his lights so shine that his audience saw his good works and rejoiced.

THIRD DAY.

Dr. Sayre asked to be investigated by a committee; but opposition being made, he was laid on the table by motion of Dr. Maddox.

Dr. Pinkney, U. S. N., read an interesting account of a visit to Europe as a delegate to the British Medical Association, which was referred to the committee on Publication.

Dr. Smith, Pa., submitted a report in favor of the adoption of the nomenclature of diseases framed by the Royal College of Physicians, London, and was followed by Dr. Underhill, N. Y., on the same subject. The report was accepted, and after some discussion a resolution to adopt the nomenclature was carried.

On motion by Dr. C. C. Cox, it was resolved to request the Surgeon-General's permission to duplicate Dr. Woodward's admirable histological microphotographs for the benefit of medical colleges and other professional institutions.

Dr. Antisell moved a vote of thanks to the Surgeon-General for the beautiful and instructive exhibition of the preceding evening, accompanied by a recommendation that the Secretary of War promote Drs. Woodward and Otis for their services in advancing medical science in the army.

Authoritative recommendations being the order of the day Dr. Stein, N. Y., recommended the establishment of veterinary schools in all the States, and that the various Legislatures be recommended to appropriate the taxpayers' money to the support of such schools. He further recommended that veterinary surgeons be appointed in the army, with the rank and pay of human surgeons. As there could be no possible result, whether for evil or good, in adopting the first of these resolutions, it was carried; the proposed equalization of army-surgeons and horse-doctors, however, led the majority to cry "*Equo ne credite, Teucri.*"

Dr. Storer, Mass., moved the erasure of the absurd ethical prohibition of specialists' cards in medical periodicals; but the customary outcry was made by a number of gentlemen who prefer advertisements of universal proficiency, and the motion was lost. [Which was a highly consistent procedure, but which will in all probability have but little effect upon the advertising columns of the journals in that section of our country, from whence the objections usually proceed.]

Another recommendation that Congress regulate the quarantine laws, was adopted under the facetious supposition that Congress knows anything about quarantine laws, or would bother its collective head about them if it did, while reconstruction and the tariff jobs offer such a profitable field without the slightest intellectual effort.

Dr. Stewart, D. C. offered the apparently pertinent resolution that persons who were not members of the Association should not be competent to serve on its committees; but his suggestion found no favor.

Dr. Mussey proposed to obviate future complication with delegations from the District of Columbia, by rescinding the provision that every other session of the Association be held in Washington.

Dr. Kerwin, Pa., read a paper on the treatment of the insane, which was referred to the Committee on Publication.

A resolution was then adopted that the writers of publications which, from the Association's point of view, might be deemed professionally improper, should be excluded from membership. (Which resolution fills your correspondent with trepidation, in case you should incautiously reveal his identity.)

Dr. White, N. Y., in reckless disregard of the "masked epilepsy" testimony in a late murder trial in your city, moved that all medical colleges throughout the country be recommended to establish chairs of nervous and mental disorders; which motion, in a paroxysm of impulsive mania, was carried.

A committee on legislative measures for preventing the spread of epidemic diseases was appointed.

Dr. Antisell rose to refute a calumny published in the Washington *Chronicle*, which he denounced as utterly false.

Dr. Rayburn attempted to reply, but was prevented by hissing and disorderly manifestations on all sides.

A double-barreled report was then heard from the Committee on Ethics: Dr. N. S. Davis, Chairman, firing the right barrel for the majority, with a very scattering charge, and Dr. Stille pulling the minority trigger of the extreme left, with a much truer aim.

The majority report stated that the Committee had registered the delegates from all the organizations in the District of Columbia, except the Alumni of Georgetown, the National Medical Society, the Howard Medical College, the Freedmen's Hospital, and the Small-Pox Hospital; that the charges offered by Dr. Rayburn, as a minority of the Committee on Registration, against the Medical Society and the Medical Association of the District of Columbia, were not of a nature to require the action of the Committee; that so far as relates to the Medical Society of the Alumni of Georgetown College, it has been shown to the Committee that the Society has sixty resident members, and is therefore entitled to six delegates; that in regard to the Medical Society, Howard Medical College, Freedmen's Hospital, and Small-Pox Hospital, they recommend that such action of the Committee of Arrangements as relates to the registration of members, is purely clerical. If credentials in proper form are presented from any Society professing such membership as would place it *prima facie* in the list of bodies enumerated in the Constitution of the Association, and entitled to representation, but against which charges have been presented, the names of the delegates presenting such credentials, together with the charges in the possession of the Committee, should be presented to the Association for its action; that the charges in the hands of the Committee of Arrangements, against the

eligibility of the National Medical Society of the District of Columbia, have been sustained; that they recommend that no members of the Society should be received as delegates at the present meeting of the Association.

The minority report dissented from the final resolution of the majority, recommending the exclusion of the members of the National Medical Society of the District of Columbia from the present meeting of this body, and offered a resolution that the National Medical Society, the Howard Medical College, the Freedmen's Hospital, and the Small-Pox Hospital are regularly organized as the rules require, etc., and that they are entitled to representation, and that the physicians claiming to represent them are entitled to seats in the American Medical Association.

The reception of these reports forcibly recalled a democratic primary ward-meeting in an active political campaign. Cheers, hisses, shouting, and general hubbub ensued to an extent that would have gratified the heart of Marshal Rynders, or warmed the vitals of the frequenters of Donnybrook Fair. When the question was finally reached, another question arose as to who was entitled to vote on the question from the District, and the Chair decided that those who were included in the majority report could vote, and those who weren't could'nt.

Dr. Cox, who had been serving as a sort of shuttlecock between the controversial battledores, until he was rather tired of the business, endeavored to get a word in edgewise, but was hissed down, and amid a scene of turbulent confusion, Dr. Stille's report was sent to slumber in the stilly night of oblivion, and the majority report was accepted as the small sense of the Association.

FOURTH DAY.

The disqualifications of color having been exhaustively studied in the black absorption bands of the ethical spectrum, and the object of the Association apparently being to reduce the representation of the profession to the smallest possible limits, a discussion was raised as to the reception of delegates from colleges which admit women to the practice of medicine. After the expression of sentiments which might drive the faculty of the University of Edinburgh and divers institutions of Continental Europe to immediate suicide, the question was postponed indefinitely.

Dr. Palmer, Me., moved an inquiry into the rejection of delegates from Howard Medical College, which is a properly chartered institution and in regular standing; but withdrew the motion, on an agreement by Dr. Davis to give in writing the reasons why his Committee had reported adversely to that College.

A motion by Dr. O'Sullivan, N. Y., that the Association take measures to prevent the renewal of prescriptions by apothecaries, was referred to a special committee.

A protest was made against the former report of Dr. Pinckney, U. S. N., concerning the happy condition of the Naval Medical Staff; but on Dr. Pinckney's showing that he knew what was good for his colleagues better than they did themselves, the protest was tabled, and the subject referred to a special committee to report next year, by way of bringing it to a speedy conclusion.

More reports from the Committee on Ethics, on charges against corporations and individuals, were referred.

Dr. Hartshorne, Pa., moved an amendment to the Constitution, admitting women to membership, which was, of course, laid on the table.

Dr. Powell, Ga., moved that no institution be recognized, against which charges are pending, thus reversing the usual legal maxim, and holding the accused guilty until the negative of innocence is proven. After some debate, the matter was laid over under the rules.

Papers on Insane Asylums and Epidemics were read and referred to the Committee on Publication.

It was resolved that Dr. Horace Wells be declared the original discoverer of anæsthesia; Morton, Jackson and Humphrey Davy to the contrary notwithstanding.

A vote of thanks was passed to Dr. Mendenhall, for the able manner in which he had presided.

Another storm was raised by Dr. Sullivan, Mass.. who presented a resolution that no distinction of race or color should exclude duly accredited delegates from the Association. A disgraceful turmoil prevailed for some time, and when the resolution was subsequently reverted to, it was tabled by a vote of 106 to 60.

In the meantime, Dr. Davis read his promised explanation of the Howard imbroglio, as follows:

"In reply to the resolution of the Association, calling upon the majority of the Committee on Ethics, for the reason why they, in their report, excluded the delegates from the Medical Department of Howard University, they respectfully state that there is nothing in the report which directly excludes delegates from the said University or any other medical institution in the District of Columbia, except the National Medical Society."

The resolution on this subject, reported by the Committee is in these words:

Resolved, That the charges lodged with the Committee of Arrangements against the eligibility of the National Medical Society of the District of Columbia have been so far sustained that we recommend that no member of that Society should be received as delegate at the present meeting of the Association.

It will be seen that the only parties excluded from admission as delegates at the present meeting, are the members of the National Medical Society. If the Medical department of Howard University had chosen to send any delegates who are not members of that Society, there is nothing whatever in the report to prevent their being received. In the papers referred to your Committee on Ethics, were a list of charges with specifications in the usual form, against the registration of the National Medical Society. Thes charges may be clearly stated as follows: 1st—The said National Medical Society recognizes and receives as members, medical men who are not licentiates, and who are acting in open violation of sections 3, 4, and 5, of the law of Congress, constituting the charter of the Medical Society of the District of Columbia. 2d—That a large part of the members of the National Medical Society are also members of the National Medical Association of the District of Columbia, and are freely and openly violating the rules and ethics of the Association to which they have subscribed. 3d—That they have both in its capacity as a society and by its individual members, misrepresented the action of the Medical Society and the Medical Association of the District of Columbia, and used unfair and dishonorable means to procure the destruction of the same, by inducing Congress to abrogate their charter. Each and all of these charges were, in the opinion of a majority of your Committee, fully proved by the members of the National Medical Society themselves, who appeared voluntarily before your Committee as witnesses. Therefore if we have any regard to the maintenance of the laws of the land on the ethics of our medical organization, the undersigned could not come to any other conclusion than was expressed in the

last resolution recommended by the majority of the committee on Ethics.

Dr. Rayburn rising to reply, it was objected that he was not a member; but five minutes was granted him, in which he denied having violated the Code of Ethics in any way. He further complained that on making his report as Chairman of the Committee on Credentials, he had been shamefully treated by the Committee of Arrangements.

Dr. Antisell refuted the charge that Dr. Rayburn had been treated shamefully.

Dr. Loomis, D. C., was a member of the Faculty of Howard Medical College, and couldn't see why he was excluded. He moved that the Committee on Ethics be censured for its majority report. Tabled.

Dr. Johnson, D. C., gave a full account of the civil war between the societies of the District; and called attention to the unethical fact that Dr. D. W. Bliss's name was placed on the bill of fare at Willard's Hotel as a separate course, which entry could not be regarded as a legitimate game.

Dr. Bliss denied unfair complicity in the bill of fare. Drs. Busey and Marbury, however, pressed the charge, and seemed to consider that Dr. Bliss had dished himself voluntarily on Willard's dinner-table.

Dr. Busey made a quotation to show that the attempted introduction of colored practitioners into the Medical Society of the D. C., was in violation of ethical rules; [he did not quote the section of the Code which declares that "Every individual on entering the profession is entitled to all its privileges and immunities"] and denied that politics had anything to do with the difficulty.

Dr. H. R. Storer, Mass., then offered the following resolution:

"That inasmuch as it has been distinctly stated and proved that the consideration of race and color has had nothing whatever to do with the decision of the question of the reception of the Washington delegates, and inasmuch as charges have been made in open session to-day distinctly attaching the stigma of dishonor to parties implicated, which charges have not been even denied by them, though present: therefore

Resolved, That the report of the majority of the Committee of Ethics be declared as to all intents and purposes unanimously adopted by the Association.

Having adopted which, by a majority, the Association adjourned to May, 1871.

Thus ended a session which will long be memorable for the spectacle it presented of a professedly scientific association sinking all scientific considerations in the discussion of partisan or personal dissensions; subordinating the welfare of the whole profession to the unreasoning prejudices of cliques; denying membership to the very men whom it had selected as qualified to serve on its committees; and frittering away ignobly the time which should have been devoted to grave and impartial deliberation on affairs of real importance; leaving undone those things which it ought to have done, and doing just those things which it ought not to have done.

VINDEX.

HISTORICAL NOTES ON MANNA.

At a late meeting of the Pharmaceutical Society, Mr. Daniel Hanbury, F. R. S., alluding to the doubtful substance provided for the sustenance of the ancient Israelites, and termed by them manna, and the origin of substances known in subsequent ages under that name, the author mentions the fact that modern manna is derived from a species of ash cultivated in Calabria in Sicily. His inquiries had, however, elicited the curious fact, that in the early history of Sicily no mention is made of manna as a production of the island, and it was this and other results of his researches which formed the body of his interesting communication to the Pharmaceutical Society. With regard to the manna described in the book of Exodus as falling from heaven he considers that, accepting the Mosaic account as the narrative of a real event, it may be safely affirmed that no phenomena is known which is at all adequate to explain it, although the notion of the ancients, that manna is of the nature of dew, and falls from the sky, still lingers in the East.

The author was, however, specially anxious to ascertain the period at which ash-manna was first collected, to elucidate which point he had investigated the works of many authors of early times. Another point of interest was the custom of making incisions in the trees to promote the exudation of the manna, which had given rise to much controversy about the middle of the sixteenth century. We cannot, in conclusion, do better than recapitulate the points in the history of manna upon which Mr. Hanbury's valuable efforts have succeeded in throwing light.

1. That the manna known in Europe in very early times was probably of Oriental origin.

2. That the manna of the ash began to be collected in Calabria in the first half of the fifteenth century.

3. That the practice of making incisions in the trees in order to promote the exudation was not commenced until about the middle of the sixteenth century, previous to which period the only manna obtained was that which exuded spontaneously.

4. That although the existence in Sicily of a mountain called by the Arabian name, *Gibilmanna*, would seem to indicate that manna was collected during the period of Mussulman rule in that island, evidence has not been produced to prove the fact, but that, on the contrary, it appears that manna was gathered in Calabria long anterior to its collection in Sicily.

Prosessor Bently agreed with Mr. Hanbury in dismissing the question of the origin of Israelitish manna.

Mr. Haselden alluded to the various applications of manna a few years back. He considered its only present use was to make blue pills, for which purpose it served admirably.

Mr. H. Sugden Evans asked Mr. Hanbury if he had ever met with any artificial manna. He had himself met with a sample from France.

Mr. Hanbury had heard of, but had never seen, artificial manna. Conceived it would be difficult to imitate its natural appearance.

Mr. Morson had known artificial manna to be made, or rather he had known common cheap manna to be purified and so moulded as to exactly resemble the best natural article.—*Chemist and Druggist.*

"SARSAPARILLA TOWNSEND."

Apropos to the death of "sarsaparilla" Townsend, the Boston *Courier* says, as if it were something for newspapers to be proud of rather than to blush for.

"The secret of the great wealth of the Townsend's, Jaynes, Ayerses, and Brandreths, has been a system of persistent and continual advertising. The newspapers have made them Crœsuses." It is unfortunately too true that the counting rooms of newspapers are willing to countenance almost any sort of imposition on the public, but it is not often that the editorial department so frankly confesses the fact. —*Medical Gazette, N. Y.*

ORIGINAL COMMUNICATIONS.

DIFFERENTIAL DIAGNOSIS IN INTESTINAL OBSTRUCTION.

By J. D. B. Stillman, M. D.

I propose to consider how far auscultation, or the principles of acoustics, may be applied to aid in the diagnosis of the various forms of intestinal obstruction.

We will follow Fagge,* of Guy's Hospital, in the classification of the various causes of obstruction, except that for the present purpose it is best to retain hernias, with other and all forms of strangulation, for they all give rise to the same set of symptoms, and it is advisable to associate in the mind, with every suspected case of obstruction, the possibility of hernia as the cause, that attention may be given to it early, and when it is not, that it may be eliminated from further consideration.

Fagge places all causes of intestinal obstruction under six heads.

1st. Those in which the gut is plugged by its contents.

2d. *Intussusceptions* or *invaginations*, in which the gut is plugged by itself, as when one section of the tube is pushed into the portion immediately below it, as occurs in the fingers of a glove when drawn from the hand.

3d. *Strictures*, or narrowing of the calibre of the gut, by disease in its coats, a familiar illustration of which is found in schirrus of the pylorus and the rectum.

4th. *Contractions*, closely allied to the last, but in which the disease begins external to the intestine, in contiguous tissues, as the serous surface, or peritoneum, or in the mesenteric glands.

5th. *Volvuli*, including *folds* and *twists* of the intestine.

6th. *Strangulations*, whether *internal* and concealed, or *hernias*.

These are all the assignable causes of intestinal obstruction enumerated by the above mentioned writer.

Under the first head are included all cases of constipation and impaction of the gut, from whatever cause; and it will excite the surprise of many to learn that of the 600 necropsies of intestinal obstruction investigated by Brinton, not one was attributable to this cause, except a few cases of impaction of large gall stones, which had entered the intestine by the sloughing of the gall bladder and the intermediate intestinal wall. Fagge remarks: It may be taken as a proof of the rarity of obstruction due to causes of this nature, that in no one of the fatal cases recorded in our post mortem reports during the period I have named (from 1856 to 1868) was the disease set up by a gall stone or intestinal concretion, a mass of fruit stones, or any substance lodged within its interior. In making this remark, I am of course excluding those instances in which such a body, lying in the cæcal appendix, or in a diverticulum of the ileum, has led to inflammation and ulceration of the mucous surface, and finally to perforation and fatal peritonitis. These, as is well known, are far from uncommon. But although I have perused the history of all the cases of this kind which I have met with in searching the records of inspections at the hospital, I have not found any one instance in which total obstruction of the bowels has occurred." I desire to call attention to the last clause of this quotation, as having special significance in determining our diagnosis of a given case.

In general practice, this is the very class of cases in which our assistance is sought, and it is of great importance to determine at the earliest practicable moment the nature of the difficulty and the danger which attends the case. We will suppose a patient suffering from violent and almost continuous vomiting, obstinate constipation, and severe pains in the bowels. The pulse is feeble, extremities cold, and the whole aspect of the patient is wan, and indicative of exhaustion. It is very important to the medical attendant, and no less so to the patient, to be able to determine whether he has to deal with a simple case of impaction or one of the more fatal forms of obstruction. One of the first effects of obstruction in the gut will be distension of that viscera above the point of obstruction, and as it will contain more or less air, the degree of that distension will be determined by the sounds communicated to the ear when placed upon the abdomen. When only the ordinary gurgle or *borborigmi* are heard at the end of the first twenty-four honrs of the attack, we have no special cause for alarm, unless irritating purgatives have been administered. It is, in all probability, a case of obstinate constipation, which will be overcome by opiates, the hot bath, repeated injections of warm water, and a good supply of patience. This would be the proper treatment in any event. If, however, the distress is not relieved by these measures, and opiates do not arrest the vomiting, but signs of increasing prostration continue, and the fine musical sounds are not heard over the abdomen, also that the tympanitis is only moderate, we may be sure that we have to deal with strangulation in some form, either a concealed hernia or the small intestine is strangulated, by a loop of it having slipped through a

* Guy's Hospital Reports, vol. xiv, 3d series.

rent in the mesentery, a diverticulum or band sufficient to cause the strangulation and death of the enclosed intestine, without causing obstruction so complete as to prevent the passage of the pent up gas in the gut. These musical sounds referred to, can never be confounded with any others when once heard. They can be produced only by a membrane under a high state of tension, and vibrating in air. The slightest gurgle in any portion of the distended gut is transmitted to the ear in a high key. The first time my attention was called to it, was in the case of volvulus of the sigmoid flexure of the colon, in which the intestine was perfectly obstructed by itself, as a rubber hose may be by giving it a half-turn. Sufflation was tried in this case; but while no difficulty was experienced in forcing air into the colon, no part of it returned. The late Dr. Page, of Boston, was present, and called attention to these musical sounds in the abdomen. I have never failed to resort to auscultation in every case of suspected obstruction since. In the winter of 1868, I was called to counsel with Dr. Bennett, of this city, in the case of a young man, aged nineteen. The usual means above referred to had been used, but his condition was not improved. Stercoraceous vomiting and symptoms of collapse were present. The abdomen was tender; considerable tympanitis existed, but not marked; and the ear, applied over the abdominal region, failed to recognize the musical sounds. I unhesitatingly pronounced the case one of internal strangulation, and not intussusception. The autopsy revealed a yard or more of the small intestine slipped through a rent in the mesentery.

An attack of obstruction of the bowels, coming on suddenly, and not preceded by a growing habit of constipation, is, when attended by the musical sounds referred to, a case to be referred to the second or fifth class of obstruction. In these classes of cases, the nature of the obstruction is valvular, as shown by Dr. Brinton, and may be readily understood by experimenting with a flexible tube. Whether the case belongs to the second or fifth, is of little practical importance: treatment will be of little avail.

Nevertheless the portion of the intestinal canal obstructed may in general be determined by the considerations, pointed out by the writers above named and others. The nearer to the stomach that it is located, the earlier and more violent will be the vomiting, and the less will be the secretion of urine. Tympanitis is more marked when the large intestine is the seat of obstruction. In the former case, intussusception is probable; in the latter, volvus. Dr. Brinton suggested that the quantity of water the bowel was capable of receiving at one time enabled one to tell with considerable certainty what portion of the colon was obstructed; but in one case in my experience, when a volvulus existed at the sigmoid flexure, at least two quarts of water was passed up, but a very small portion of which ever returned, being retained by the valvular nature of the obstruction, and resulted in increasing the distress of my patient.

Dr. Brinton places much importance on pain as a means of diagnosis. He says: "It is usually intense in intussusception, and in the impaction of gall stones; somewhat less marked in the obstruction produced by twisting of the bowel, or by bands and adhesions; scanty in the obstruction of stricture, and almost absent in the obstruction caused by the impaction of fæces in the large intestine." The character of the symptoms is to be carefully noticed. Peritonitis may be developed in any form of obstruction, by purging or other stimulatory treatment; or by neglecting the ordinary simple methods of removing fæcal accumulations; and hence arises the danger in these cases. But the character of the pain in complete obstruction arises from distension of the gut; is paroxismal; is coincident with the peristalsis of the bowels, until paralysis of the muscular walls, when it is continuous, until it becomes masked in the universal distress that marks the period of collapse. Fæcal vomiting never takes place in obstructions of the first class, except where the impaction takes place from gall stones, a condition so rare, as already stated, as almost to be thrown out of the account.

The results of external examination of the abdomen are not as satisfactory as is claimed. Obesity of the patient, and the early development of tympanitis in many cases, and extreme tenderness of the abdomen, often before we are called to see the case, offer insuperable difficulties to palpation; but these conditions in no way interfere with examination by auscultation; and, at best, any inferences drawn from the first method are conjectural, while those deduced from the latter are reliable, and pathognomonic of perfect obstruction.

With respect to the third and fourth forms of obstruction, viz., stricture and contractions, when perfect, they may lead to the auscultatory symptom, but I have never been able to verify it. The history of these cases, as a general rule, will determine their nature. The foundation for them has been laid in some antecedent affection. The patient may have suffered from some peritoneal inflammation, chronic ulceration of the mucous coat of the intestine, or there may be present some organic change, such as cancer, which involves the calibre of the intestine

as one of its effects, bringing about a sudden termination of life before the constitutional effects had so far advanced as to point out the true nature of a disease that, sooner or later, would otherwise have involved the death of the patient.

PROFESSOR HALFORD'S TREATMENT OF SNAKE BITE BY THE INJECTION OF LIQUID AMMONIA INTO THE VEINS.

By E. H. Hall, M. D. Etc.,

I have frequently been asked questions relative to the discovery made by Professor Halford, of the injection of liquid ammonia into the veins as an antidote for snake poison, and deeming it a subject worthy the attention of the profession here, I send the following brief notice for insertion in the *Gazette*.

From the earliest settlement of the various colonies of Australia, the prevalence of venomous reptiles has been a great drawback to the comforts enjoyed in so fine a country. In nearly every family in the interior, there are instances recorded of some member having died from their bites, and although from time to time numbers of remedies have been tried, until recently no treatment has been sufficiently successful to merit the confidence of the profession. Of numerous agents, ammonia has been employed both internally and externally, and I believe occasionally with success; but from the speedy manner in which the virus is absorbed, administered in this form it has not been found sufficiently active in bad cases to accomplish any good.

About three years since, Professor Halford, a gentleman occupying an eminent position in the medical profession in Melbourne, devoted a good deal of time to the subject of Snake Poison, its properties and action on the system, discovering that it acted chemically on the blood, separating the serum and fibrin of the liquor sanguinis from the red and white corpuscles. He then found that liquid ammonia injected into the veins possessed the property of arresting the action of the virus and restoring the blood to its natural condition, and after repeated experiments became so convinced of its efficacy as to embody the results of his researches in a lecture, which was delivered before the Medical Society of Victoria, and strongly recommended that every farmer and resident in the country districts should be provided with a syringe, which, in the absence of a physician, could be used by the uninitiated without danger.

At the time of this remarkable discovery, the Doctor met with much opposition. Some claimed that such an operation should only be performed by a physician; others, that the introduction of atmosphere by this process must take place with considerable risk to the patient: and a number of other reasons. But taking into account the fact that such accidents do not occur in towns where members of the profession usually abound, but in country districts, where not unfrequently fifty or more miles have to be traversed before the services of a doctor can be procured; the time thus lost would certainly be fatal; therefore any means are justifiable to save the life of a fellow creature by anyone present with sufficient nerve to undertake so simple a task. One case I remember, where no physician could be obtained, a country storekeeper opened a vein with a penknife, and injected hartshorn, with a common glass syringe, saving the life of a young man, after all other modes of treatment had failed.

Since that time, Professor Halford's treatment has steadily gained ground, so many lives have been saved through its instrumentality, that it is now recognized by the profession in Australia as a reliable cure; and the colonists there are under great obligations to the doctor for his researches, as the world at large is to Dr. Jenner for the introduction of vaccination.

From inquiries I have made here, I believe the action of the poison of your American snakes is similar to that of our Australian ones, and there is good reason for anticipating that this remedy would be equally efficacious.

With respect to the operation, I have found from experience that the injection may be made into any vein, and not necessarily near the spot where the bite was inflicted. This may be determined by the surgeon, who is at once able to learn to what extent the poison is absorbed. In case No. 1, referred to below, a young man in the habit of going barefooted was bitten on the great toe, close to the metatarsal joint. I injected the solution into the median-cephalic vein of the left arm with success.

The instrument I have used was made to my order. Lancet pointed, similar in size to the ordinary sub-cutaneous, but much stronger; with the piston packed with india rubber to meet the inequalities of the glass tube, so as to preclude the possibility of injecting atmosphere. The ammonia employed was usually, Liq. Am. Fortiss., of the strength ·882, mixed in proportion of one to three of water. The vein selected, with the superficial fascia, is seized between the finger and thumb of the left hand, a lancet pushed through immediately beneath, so as to form a basis to steady the vein against the force employed in inserting the point of

the syringe, which is to be pressed in to the end of the tube, to prevent the escape of the liquid, and the piston gently pushed down until about half a drachm has been injected. A wet compress of lint is then placed over the wound and bandaged.

It was at first feared that great danger would be incurred by the injection of atmosphere into the blood; but Dr. Halford met this by stating that, under the circumstances, a whole syringe full was harmless, and demonstrated his assertion by experiments *in corpore vili.* To overcome this objection, however, not one particle of air can be introduced by simply taking care to push the piston to the end of the barrel, in order to expel what it already contains, before charging it with the solution.

I have three times had opportunities of fairly testing this treatment, and on each occasion it was successful, and left no doubt whatever of its extraordinary efficacy.

Thinking an account of these cases may be interesting, if not useful, I give them as taken from my diary.

Case No. 1. Robert D*****, while splitting wood on the morning of March 3d, 1869, was bitten on the great toe of the right foot, close to the metatarsal joint. His friends applied poultice of ipecacuanha, brandy internally, and kept him constantly moving about. I saw him fifty minutes afterwards, unconscious, surface of skin cold, pulse at wrist imperceptible, occasional slight sighing inspiration, pupils contracted and insensible to the action of light, right foot and leg anasarcous. I injected one scruple of Liq. Am. Fortiss., diluted with an equal quantity of water, into the median-cephalic vein of the left arm. In a few minutes detected pulse at wrist, and slight dilatation of the pupils. As recovery did not seem certain, I injected, in about fifteen minutes after the first, a similar quantity, in proportion of one to three, into the internal sephanous, below the external pudic, when consciousness returned, and the same evening the patient could walk without assistance.

Case No. 2. Mrs. S*****, while drawing water from a creek, was bitten on the metacarpo-phalangeal joint of the thumb dexter. Stated that she at once sucked the wound and returned to her husband's blacksmith shop, close by, who cauterized the part, and burned gunpowder over the wound. Finding the action of the poison was not arrested by his treatment, brought her to me a distance of four miles. Found her conscious but exceedingly anxious, breathing sterterous, pulse feeble and irregular, skin cold and peculiarly sensitive to the action of draught. Injected thirty minims of ammonia, strength one to three, into the basilic, just above the junction of the posterior and anterior ulnars. She recovered in somewhat over one hour.

Case No. 3. A boy, aged 11, was bitten over the orbit of right eye, close to orbicularis muscle. Saw him one hour and twenty minutes afterwards. Comatose, no pulse at wrist, frothing mucous escaping from mouth, pupils contracted and insensible to the influence of light or action of atropia, conjunctivas injected, eyelids enlarged and injected with serum. Passed half a drachm of the solution into the fascial vein, at its junction with the inferior labial. The boy recovered, though the sight of the right eye was for some time affected. On examination of the fundus ophthalmoscopically, a few days afterwards, I found that the retina had abnormally increased in thickness. The sight was restored under local treatment and tonics of iron.

The great success this treatment has achieved, undoubtedly ranks it as one of the greatest discoveries in the practice of medicine in modern times. In many parts of America, where venomous snakes abound, it is well worthy of trial, and I doubt not its application would be the means of saving many lives. It yet remains to be proved whether it may not be useful for other diseases; and while being heartily thankful that I have not lived in a country where hydrophobia occurs, yet, did a case come under my notice, I should certainly give Professor Halford's method a full and careful trial, with, I confess, not a little hope of success.

REMARKS ON THE ADMINISTRATION OF THE HYDRATE OF CHLORAL.

By Thos. Bennett, M. D.

Having on many occasions of late, been using this new hypnotic, I was gratified to find in the May numbers of the *Edinburgh Medical Journal* and the *Practitioner*, articles on this subject.

The paper in the *Edinburgh Journal*, is by Dr. George W. Balfour, and he relates how eight cases of delirium tremens were most satisfactorily treated by it. I have employed it in two:

Case 1. A middle-aged man had been drinking hard for three weeks, when I was called to see him. I found him in bed, with a wild, restless expression of countenance, a trembling of his hands, and a fancy that a string of people were constantly passing through the room making grimaces at him. He had been incessantly vomiting for the past few hours. Since yesterday he had been taking Valerian and Laudanum, which a neighboring druggist had furnished. Knowing that the chloral will sometimes check vomiting, I ordered him half a drachm at

once. In three hours I saw him again, and found that he had vomited soon after taking the dose—his stomach had, however, since been quiet; but in other respects there was no change. I therefore ordered another half drachm dose of the chloral, with instructions that a second should also be given, if he did not sleep. The next morning I found him up and well. In twenty minutes after taking the first dose he had fallen into a tranquil sleep, which continued until morning, when he awoke sane and hungry.

Case 2. I. D., a respectable, well-to-do merchant, who spends his evenings at home and does not drink wine or spirits, has about every eight or ten months an inordinate and irrepressible craving desire for stimulants. He knows what this means, and fights against the desire, but never comes off conqueror. He skulks away to a corner grocery, gets to the back part of it, and drinks bad whiskey till he is drunk. His family hunt in all directions and in a few days he is found dirty, dilapidated, and in the horrors. A scene of this sort occurred a few weeks ago. When sent for, I found him at home in a terribly excited condition, and suffering from the common illusions. He refused to take anything; so with much difficulty a dose of half a drachm of the chloral was got down. It produced no mitigation; so in an hour a similar dose was given, which had the effect of putting him to sleep for many hours. The next morning I found him quite free from delirium, but very repentant and with a very deranged stomach.

The article in the *Practitioner* is by Prof. J. Hughes Bennett. He speaks of the happy effects of the chloral, in producing a calm and refreshing sleep in those cases of Phthisis where the nights are distressed by cough, pains in the chest and restlessness, and where ordinary opiates, given for the relief of these symptoms, leave the patient depressed, feverish and weak. He relates twenty-one cases, in all of which the cough and troublesome night symptoms were relieved and sound sleep produced, while the head, tongue and appetite were in no way affected. In one case, however, where thirty grains were given, the dose in the other cases not being mentioned, great excitement, approaching delirium, was produced; and it is this case which leads me to speak of two of my own.

Case 1. A young lady, with embarrassed circulation arising from valvular imperfection, the result of an attack of acute Rheumatism, had also a vomica in the left lung. She was harassed by incessant cough, sleepless nights and profuse sweats. Morphia relieved her and so did Codeine, but both left nausea, depression and headache in the morning. One evening, when her cough was worse than usual, I prescribed for her thirty grains of chloral, and ordered it to be repeated in an hour if the first failed in its requirements. A short time after taking the first dose, a considerable amount of restlessness and mental excitement was produced. So the second dose was given, and the consequence was, she passed the night in a state of actual delirium.

Case 2. A man, thirty-four years of age, in the last stage of Phthisis, with a large vomica in both lungs, could never sleep at night from incessant coughing, without taking a dose of Battley. This, however, always produced nausea the following morning and still farther spoiled his bad appetite, so that when I read of the virtues of the chloral, I anticipated a happy boon for him. I therefore gave him thirty grains at bed-time, and next morning found that he had passed a wretched night, fidgetting and tossing about, first on the bed, then on the sofa, but no sleep.

I may here mention that at the time Chloral was introduced, these doses of half a drachm and even a drachm were recommended. The cases just mentioned will show what excitement such doses will cause.

I have given this Chloral many times since, but my doses now are ten or fifteen grains, and I uniformly receive entire satisfaction from its use. It procures a calm, refreshing sleep in a very short time, sometimes a quarter of an hour, and does not produce any gastric disturbance. This small dose will not, however, in my opinion, suffice for calming down a case of Delirium Tremens.

IRON IN RHEUMATISM.

By C. F. Buckley, A. B., M. D.

No very extensive experience of rheumatism is necessary to convince every person who has paid the least attention to the subject, that the various plans of treating it at present in vogue, are extremely unsatisfactory and uncertain. At one of the recent meetings of the Clinical Society of London, the whole subject was thoroughly canvassed, and notwithstanding that Fuller, Garrod, Gull, Basham and others of no less note took part in the discussion, yet no satisfactory conclusion, indeed no conclusion at all was arrived at, and the matter was still practically left in *statu quo*, for, while some produced very ample statistics of their experience as to the benefits of mercurials, or opium, or salines, or quinine, or *expectation*, others again showed the evil results of one or either of those plans of treatment in their own hands. The result of this discussion is, I believe, a fair representation of professional feeling, not only in Europe but also in this country, and it certainly seems a matter of no common

reproach to us, that in this period of our advancement, real or reputed "Rest and Six Weeks" should still be an unabandoned nostrum for so dangerous a malady as rheumatism. I know not whether I advocate anything more useful, but certainly iron has appeared to me in the few cases in which I tried it, to have a decidedly beneficial effect in this disease.

In the "Dublin Quarterly Journal" for December, 1869, Russell Reynolds published a few cases of acute rheumatism, which he treated with Tr. of Iron, and the issue of which appeared to him unusually satisfactory. The treatment seemed to him to make an impression from the first, and the duration of the disease seemed shorter than usual. I determined accordingly to try this plan at the first suitable opportunity. I have now notes of six cases in which I used it, and in all with very marked effect. The first was S. B., a gentleman of 45 years old, of strong robust constitution, upon whom I was called to attend on the 14th of March. He had been previously ill a week and attended by another medical gentleman. Had always enjoyed good health up to the present attack, which commenced with severe rigor after some unusual exposure at night. When I first saw him, his tongue was coated with a thick white fur, and his aversion to nourishment of all kinds was extreme, his eyes were somewhat congested and his forehead and face covered with clammy perspiration, though all the rest of the surface was quite dry and very hot; bowels acted regularly under previous treatment; urine was scanty and high-colored, with film of purpurine on side of chamber-pot; pulse-beat 120; no cardiac complication; respiration about 20; complete inability to move any portion of his body without suffering intense pain; scarcely any perceptible swelling of any of the joints. I ordered him tr. ferri 3ʒ, spr. eth. nit. ½ʒ, syrup ½ʒ, aquæ ad. 6ʒ, a table spoonful every three hours, with beef-tea and toast-water for nourishment and drink. 15*th.* Experienced marked relief, pains much less; pulse-heat reduced to 110; passed somewhat more water, and had a general feeling of comparative happiness. The treatment was continued unchanged for four days, at the end of which he was ordered 4 oz. of brandy daily, in addition, as the pulse was feeble throughout. Improvement advanced steadily, and on the sixth day from the time I saw him, he was able to sit up in his bedroom. I ceased attending him on the 23d, nine days from the time of commencing treatment and up to the present—a period of three months—he has enjoyed unimpaired health.

Case 2. Was a laborer named Farley, at the County Hospital, a man of rather spare, lymphatic habit, of some 34 years old. He had been in hospital some time previously, suffering from acute rheumatism, and under the care of Dr. Douglass. Having left hospital rather too soon he again returned with a subacute attack. I first saw him with Dr. Douglass, on the 24th of May, when he was evidently advancing steadily under the treatment prescribed. On the 25th, Dr. Douglass kindly placed him under my charge, and seeing the good effects of his treatment in every respect, it was ordered to be continued. After seven days, the patient being perfectly free from all rheumatic complications, except a stiffness and painfulness in the right knee, which incapacitated him from getting out of bed, and showed no sign of improvement, I put him on the iron treatment as above, but with ten minims instead of fifteen for a dose. He showed no advance before the second day, but thence forward the improvement continued steadily, until he left hospital quite well on the 18th inst.

Case 3. A young man named Kempen, of some thirty years old, tall and muscular, was brought to hospital on May 24th, with evidence of extreme constitutional disturbance. The resident physician, Dr. Boland, entered the case as one of Pulmonary Congestion, in which diagnosis both Dr. Douglass and I quite concurred, after careful examination of him on the morning of the 25th. The right lung was principally involved, over which he was cupped and blistered. Saline diaphoretics with tartarized antimony, were the medicines prescribed, together with an occasional purge. Ordered beef-tea three pints daily.

June 1*st.* Sputa tinged with blood, but in masses larger than what is known as rusty sputa; ordered six oz. port wine, and beef-tea continued; antimony discontinued.

June 4*th.* Thoracic symptoms considerably improved, breathes more free, cough and expectoration less, but complains for first time of *pain in right shoulder;* wine stopped; ordered mixt. of potas. acat., spr. nitre and liq. am. acet.

June 5*th.* Fever much higher, pulse 124; urine scanty, and pains extending in other joints; all evidence of Rheumatic Fever; ordered tr. ferri 2½ʒ, spr. nit. ʒ, in five oz. mixture.

June 6*th.* Considerably relieved this morning; pulse 104, but pains continue unabated mainly in right arm and left leg, both of which he is quite unable to move.

June 7*th.* Pulse reduced to 96, feels less pain, but yet unable to move right hand or left leg.

June 15*th.* Treatment has been steadily continued, the patient, in broken English, reporting himself

somewhat better every morning, though without any very marked improvement. The attendant draws my attention to a soft, deep-seated enlargement about the size of an egg, on the thorax, a little to left of the sternum and directly beneath the clavicle, which in his way, he pronounces Aneurism, having been accustomed to see numerous cases of this latter malady about the same region. On examining, however, I find it to be an abscess diffused under the left pectoral muscle, and pointing very prominently in left axilla. The abscess having been opened, discharged about five ounces of healthy pus. The orifice is dressed with carbolic acid. Iron treatment continued; beef tea increased; 3 eggs daily and 8 oz. of brandy added.

June 16*th.* Feels relieved considerably; can move right arm a little better; abscess again discharges same quantity of pus. Left knee and ankle more swollen, but not more painful.

June 23*d.* When I write, the abscess has nearly ceased to discharge. The lungs are quite free from complications; the circulation is 88; right shoulder and left leg still painful, but not nearly so severe, and capable of motion to a limited extent; patient greatly emaciated and powerless, commencing to be troubled with bed-sores; hectic flush occasionally manifest.

Case 4. On Dr. Blake's leaving town for a few days on the 14th inst., among other patients whom he entrusted to my charge was a young man, an employé of his own. He told me he had an attack of acute Rheumatism for some eight or nine days previously; that he had been treating him with salines, but from his constitution and previous history he had a strong inclination to try the effect of Iron, on general principles. On my telling him that I had seen it recommended by Reynolds, as well as my own limited experience of its beneficial effects, he readily consented that it be given to R. M. At my visit next morning, he laid prostrate in bed with face somewhat anxious and haggard, pains in wrists and ankles so severe as to practically preclude all motion in those joints. Pulse 112. Skin moist but clammy, and urine scanty. (I should have mentioned that the scantiness of urine was the main objection Dr. Blake had to not having given him Iron previously.) I ordered Iron with considerable confidence in 15 minim doses, and the result quite justified my expectations, for on my visiting him the following day, the improvement was marked and decided. After three days of the same treatment, he was able to get out of bed, sit up in his bed-room, and has since been convalescing without any untoward symptom.

Case 5. N. L., a waiter of spare, thin bodily habit, age between 30 and 40, entered the County Hospital on the 12th inst. with all the characteristics of severe Rheumatic Fever. Nearly every joint was very painful except the right shoulder; wrists and and ankles particularly involved, being very much swollen also. The treatment instituted was, Tr. Ferri in 15 minim doses, every four hours, with beef tea and chicken for diet. On my visit next morning there was a decided impression of the effects of the medicine on the disease, for the pulse-beat was reduced, the temperature lower, more water was passed, the relish for the prescribed nourishment was much greater than previously, and the pains in the joints not quite so severe. This man has been since then, making a steady but slow advance, and has been found quite free from any cardiac complication. He can now—23d—move all his joints, but with some little pain as yet, and is still as a matter of course confined to bed.

Case 6. The sixth case is that of a mechanic, D. D., to whom I was called four days since. This man had hitherto been of more than ordinary vigor and strength. The present attack commenced a fortnight before I saw him, with rigors and severe pains all over. He has been under another gentleman's treatment, and evidently improved considerably, but not sufficient to satisfy himself. When I saw him, pain was mainly confined to the ankles and finger joints; considerable anorexia, bowels acting regularly; urine scanty, and pulse feeble; absence of febrile disturbance; fearful of being a "cripple for life." After 48 hours of the treatment previously detailed—tr. ferri Min. XV, every three hours—he felt so well that, to use his own expression, "he could jump over a house." He is now on the fourth day of the treatment able to sit up out of bed, and is evidently on a fair way for a rapid recovery.

I regret that the majority of those cases are necessarily so incomplete, but from the excellent, unexpectedly beneficial results I have witnessed from iron in those cases, I have desired not to defer introducing my experience of its use, however limited, to the notice of the profession. I am not inclined to the opinion that iron is a specific for rheumatism, but I think it has decidedly such advantages as entitle it to a fair and impartial trial. I shall most probably soon return to the subject again. For the present I will merely add, that the above cases are given just in the order in which they occurred, and that no other cases of rheumatism came under my observation during the time. I publish them for the present without comment, their crudeness is self-evident. Let the importance of the subject be my apology.

PRIORITY OF SEX.

By A. S. Hudson, M. D.

Does science furnish any reason for the current belief that the *male* came into existence before the female?

Without discussing this side of the question, let us transpose the interrogatory and ask: Is there not reason to suspect woman is a *primary* and man a secondary? Is not the female the independent forerunner, and more than an individual; is she not an element, a first principle? If man is elementary, he is so jointly. The primitive *female* is exclusively primordial and generic.

This view of the subject begins not in the present but in the far back outset of existences, when effects and details were few, when force and cause were direct and concrete, when the powers of the universe were mutually interchanging energies, impressing, moulding, and tempering raw material, when nature was busily engaged in maturing patterns, working on general principles, dealing with whole numbers, and before a multiple of organ and a division of labor were reached.

As you enter the temple of the genesis of living things, microscope in hand, devoutly study the order of nature while in gestation and labor. Be honest with her and true to yourself, defend the legitimacy of the offspring brought forth, record the genealogy and print the lesson.

When in the play of vital action an organism repeats itself, reproduction is accomplished; the first principle of generation is announced, and the attitude of parent and offspring is first adumbrated and then defined. The being that executes it singly, becomes the representative of the *female* in her primitive type. To be exact we must embrace details:

First. If a mustard seed were soft and cut in two, and each half to become like the original seed, it would represent the mode of reproduction by *duplication*, or binary subdivision; it would typify generation of most of the prototypes and many of the protozoa. The direction of the movement is from circumference to centre.

Second. If the contents of the mustard seed at muturity were to divide into 2, 4, 8, 16, 32, and so on, and each division to become first a granule, and then a cell; and finally if its outside wall or coverwere to rupture and liberate the contained cells, young organisms like the predecessor would be set free, and represent the mode of reproduction by interior segmentation, as witnessed in a little aquatic plant, the *volvox globator*.

Third. If the mustard seed were elongated like an almond, and from one end of it should shoot a fast growing bud, a seed, like the first, and from that another, from the third a fourth, and so on, reproduction by gemmation or budding is portrayed, which is characteristic of one of the yeast plants (Torula), many of the algæ, also of a few inferior animals. The hydrozoa or coral builders multiply alternately both by segmentation and budding. In the one case they increase as a fixed family; in the other, as a wandering colony, to become scattered like seed.

Fourth. If the outer wall of two mustard seeds, placed side by side, should dissolve at the point of contact, and the contents of the two seeds were to mingle and join in one, the result is a spore or embryo, from which springs a new being. Reproduction by conjugation is here foreshadowed, as displayed in sphæroplea.

In the above three examples is set forth the earliest idea of the multiplication of the species. It is generation of the original unit, before a division of function and differentiation of organ is acquired.

Now what shall we say is the parentage in the cases above cited: male or female? Is it not all on one side? Is it not pre-eminently maternal? There is evidenced no semblance of the paternal? Add further evidence, and bear in mind, that the gall insects, dipolepsis and cynips, the water flea, daphnia, the little insect known as apus, are all females, and multiply their kind without concurring males. Therefore the conclusion is arbitrary. We are led to the inference that the female takes priority of existence in time and place. What then is she but a conspicuous primary, with the status of a whole number, a first principle, and a first parent.

The fourth case in illustration, by combining or compounding the powers of the two filaments or cells into one, the first step is taken towards a distinction of sex. Further, when one of these cells, prior to their union, shall exhibit moving bodies (antherida), within its substance (endochrome), which correspond to spermatozoa of higher forms of life; and in the other, "still" spores, which find answering bodies or germs in the better defined finale, the advent of the two sexes is pronounced.

Here, then, one mustard seed represents the male and the other the female; and we define the male not a unit, but a segment of the primordial integer, a differentiated secondary. He comes upon the stage at a later epoch. Likewise, at this later period of life evolution, the female relinquishes her independent state of oneness, and occupies the same differentiated plane with her partner the male. Thus we observe the first appearance of the female is by herself, while the first appearance of the male is by the side of the female.

AUTOPSIES MADE BY J. LETTERMAN, M. D., CORONER OF SAN FRANCISCO.

Reported by EDWIN BENTLEY, Assistant Surgeon U. S. Army.

Case 64th. "Poisoning, (Mineral.)"

T. C., Irish, mechanic, aged fifty (50) years.

Autopsy forty-eight (48) hours after death; rigor mortis slight; suggillations on dependent parts; pupils normal; cadaver presented an exceedingly pale and ex-sanguine appearance; right false ribs more prominent than the left; Sectio Cadaveris.

Head. A few drops of blood only followed the knife in dissecting the scalp; membranes and brain hyperæmic; two ounces of bloody serum in the dependent membranes at the base of the skull.

Thorax. Hypostasis of both lungs, no adhesions; the heart normal, dark blood clots in the right side.

Abdomen. Liver and spleen apparently healthy; right kidney atrophied, so that little more than its outline in the form of a thickened capsule was left; right kidney healthy and not above the usual size in health; the stomach (the principal point of pathological interest in the case), was lined throughout; with the greatest density about the greater curvature, with a black carbonaceous mass nearly the eighth of an inch in thickness. There were no perforations, and the black melonotic condition did not extend beyond the pylorus.

Remarks. If we accept the theory (which is denied by high authority), that gastromolacia is always a post-mortem change, we need have no confusion in this case, for no softening is found, but an increase of thickness and tonicity. The blackness is not found in the fundus alone, but the whole internal surface.

Case 65th. "Meningitis and Epilepsy."

G. D., American, property-clerk, aged thirty-two (32) years. Reported to have led a life of intemperance, and addicted to the most irregular habits; subject occasionally to fits of epilepsy.

Autopsy ten (10) hours after death; rigor mortis well formed, neck swollen; suggillations about the face and neck; pupils dilated; purging from the mouth and nose; bowels tympantic; Sectio Cadaveris.

Head. Scalp congested, dark blood readily flows from the usual incisions made to raise the scalp; membranes of the brain congested; brain hyperæmic; effusion of serum under the visceral layer of the arachnoid; over the posterior part of the posterior lobe of the left side, the arachnoid is thickened one-eighth of an inch for the space of an inch and a half, and adherent to the dura mater.

Thorax. Hypostasis of the lungs; heart enlarged, valves healthy.

Abdomen. Liver enlarged and exceedingly congested; capsule of the spleen thickened; kidneys hyperæmic; bladder empty; mucous membrane of the stomach inflamed; intestines distended with fæcal matter and gas.

Remarks. It has not been uncommon to find in cases that have been subject to epilepsy, some organic change in either the membranes or the brain. These may be the cases which are not cured, by the continual use of efficient popular remedies, as the bromide of potassium.

Case 66th. "Homicide, Pistol Wound (Colt's.)"

J. B., Irish, cart-driver, aged forty (40) years. This is the fourth brother which has been killed in the same family from personal encounters. Reported to have been an habitual toper; lived about twenty (20) minutes after the receipt of the wound.

Autopsy fourteen (14) hours after death; rigor mortis strong; very large muscular man; bullet wound at the left and just below the umbilicus; incised wound over the right eye; large inguinal hernia of the right side; Sectio Cadaveris.

Head and *Thorax* not opened.

Abdomen. Three pints of blood in the cavity of the peritoneum; track of the ball upwards and inwards wounding the celiac axis, piercing the serous and muscular coats of the stomach near the pylorus, cutting away one-third of the calibre of the duodenum for a space of three inches, then passing through the upper part of the zigunum, was found imbedded over the twelfth dorsal vertebræ; liver enlarged, congested, and the left lobe folded on itself; spleen enlarged and soft; kidneys hyperæmic; intestines healthy.

Remarks. The hernia had become so strangulated that a force applied to the proximal end, with the hand in the abdomen, sufficient to lacerate the gut, failed to reduce it. The stricture which in this case with the neck of the sac, being divided, it immediately passed. The strangulation probably occurred here after death.

Case 67th. "Still-born."

Female infant child, found dead in a private vault at the cemetery.

Autopsy one week after the alleged death of the child; presumed to be Spanish; weight five (5) pounds, nails perfect; body of a livid color; Funis five inches long, tied very loosely, and turned once around; cord withered; no appearance of a line of separation at the umbilicus; no external marks of violence; partially washed; reported to have lived three hours; a dispute arose between the mother and midwife about the illegitimacy of the child; Sectio Cadaveris.

Head. Scalp raised; no tumefaction about the head; brain of the usual consistency of new-born infants, which is exceedingly soft.

Thorax. Lungs collapsed, and nearly as firm and resisting as the thymus gland, when removed and subjected to the hydrostatic test, they were found to have never contained air; they readily sank in water.

Abdomen. Organs and the vessels appeared normal.

Remarks. The hydrostatic test is satisfactory in a negative sense. If they sink they have not contained air, and the child has never breathed. If they rise it may be from decomposition. Gas may have entered them, or it may have been blown into them.

Case 68th. "Poisoning, (Alcohol.)"

R. S., English, grocer, aged forty-three (43) years. Found dead in the back room of a saloon on packing boxes. Had been suffering sometime from diarrhœa; for a long time a patient of the City and County Hospital.

Autopsy twenty (20) hours after death; rigor well formed; slight emaciation; normal pupils; marks of tertiary syphilis; endolent open ulcers on both legs; proximate weight one hundred and twenty (120) pounds; Sectio Cadaveris.

Head. Scalp congested, bleeding freely from the usual incision; pericranium very red; pacchyonian glands prominent and set in a layer of yellow connective tissue; vessels of the membranes dilated dark blood jetting in a full stream from the superior longitudinal sinus; effusion in the sub-arachnoidian spaces; substance of the brain hyperæmic.

Thorax. Lungs healthy, no adhesions; stasis of the dependent parts; heart healthy, fluid blood in the right side.

Abdomen. Liver cirrhosed; spleen very red and firm; kidneys hyperæmic; bladder distended; small intestines healthy; ulceration of the colon; severe gastritis involving the entire mucous surface.

Remarks. The entire system saturated with *Alcohol*, in the form of crude whisky.

Case 69th. Typhoid Fever { Ulceration of the Intestine, Perforation, Peritonitis.

B. A., Frenchman, laborer, aged eighteen (18) years. This man suddenly died in a saloon, where he had been staying for a few days, having been in the country only a short time.

Autopsy twenty (20) hours after death; no rigor present; no dilatation of the pupils; symmetrical form; no external mark of violence or treatment; proximate weight one hundred (100) pounds; Sectio Cadaveris.

Head. Not opened.

Thorax. Lungs pale, no adhesions; clot in the right side of heart; left ventricle empty.

Abdomen. In the peritoneal cavity was found one pint of yellowish fluid, in which flakes of lymph were floating; intestines weakly glued together by recent lymph, which coated the small intestines, the lower surface of the diaphragm and the anterior surface of the liver; the peritoneal coat of the intestines intensely injected, especially the lower end of the ilium near the ilio-cacal valve; Pyer's patches were generally ulcerated, and one of them about two inches from the cecum perforation; into this perforation the point of the blow pipe readily entered, and through it four (4) intestinal worms, *Arcoris Lumbricoides*, had passed, and were found living and active in the peritoneal cavity; the mesenteric glands were slightly enlarged; liver mottled in sections and fatty; spleen dark and soft; kidneys enlarged and hyperæmic.

Remarks. It has been ascertained that immediately after the arrival of this man in the East, he took passage by sail to California. His condition on ship while crossing the Atlantic was not determined. After his arrival here, he continued to eat and lay around, more in a dejected and desponding way, than from the smothered pain of inflammation, for it has not appeared that he took any medicine or gave any indication of suffering or sickness. This case no doubt possessed the true character of the enteric fevers of Europe. At least so far as the ulceration of the patches, the perforation and peritonitis were concerned. Repeatedly, analogous cases, apparently the product of this coast, have come under observation in this city.

Observation. The excellent system proposed by Surgeon H. R. Wirtz, U. S. Army, to avoid confusion in regard to the proper use of the terms Typhus Typhoid and Typhic, will be adopted in the future reports of cases, wherever these terms are used. See article in the May number, of the California *Medical Gazette.*

Case 70th. "Hyperæmia of the Brain."

J. McL., American, policeman, aged thirty-four (34) years. Has been for some time suffering from bilious attacks, for which he was taking medicine; he was also under treatment for constitutional disease; he continued to walk his beat, until the night previous to his death.

Autopsy about ten (10) hours after death; a large plethoric man; proximate weight two hundred and ten (210) pounds; slight rigor mortis; deep suggillations about the face and neck; pupils normal; Sectio Cadaveris.

Head. Scalp congested, profuse bleeding from usual dissection to expose the skull; raising the calvarium shows large drops of dark blood over the surface of the dura-mater; opening the superior longitudinal sinus the blood continued to run in a full stream dividing and separating the dura-mater. Several layers of the arachnoid are found raised and puffed with serum between the convolutions of the cerebrum. The veins ramifying over the surface of the brain injected and of a dark blue color; brain of firm consistency, and on making sections through the medullary portions, drops of blood rapidly appear; piameter injected, thickened, and readily raised; vellum interposition and choroid flexuse engorged; four ounces of blood collected in the dependent membranes.

Thorax. Lungs inflated; crepitant stasis of the posterior surfaces, no adhesions; heart healthy, blood fluid.

Abdomen. Three inches of adipose over the abdominal muscles; liver large and bleeding freely from sections; spleen soft; kidneys congested; bladder distended; mucous surface of the stomach inflamed; intestines healthy.

Remarks. Care was taken to remove the skull before opening the cavities of the body, so that the true condition of the brain and its vessels might be as accurately determined as possible, remembering that many contingencies must be weighed in order to settle satisfactorily in the cadaver, that a condition of hyperæmia of the brain existed during life.

ACADEMY OF SCIENCES.

Regular meeting of the California Academy of Sciences; President Blake presiding. The Secretary not being present, H. G. Bloomer acted as such, *pro tem.* Minutes of last meeting read; a part being from a printed report containing some errors. Dr. Stout moved that the report from the newspaper be entirely rejected and referred to the Recording Secretary for correction—carried.

Propositions—Dr. C. D. Ellenwood and John F. Geary, M. D., were proposed as candidates for membership.

Elections—Mr. T. C. Banks, Mr. Chas. B. Turrell and Mr. J. B. McChesney were elected members of the Academy.

Donations—Mr. C. D. Gibbes, a member, presented his map of California, also, a pocket map of the same, published in 1852. Mr. J. Hux, a member of the Association, presented a gas burner and lamp of his own invention, for the use of the Academy.

Dr. Arthur B. Stout presented a work upon the Cetaceans, by Capt. Scammon, who has devoted years of laborious study to this family. Dr. Stout remarked in flattering terms upon the industry and enthusiasm of Capt. Scammon in following out this subject, and thought that encouragement should be given him, as the whale fisheries were closely connected with the advancement of American commercial interests. Prof. Davidson, in some remarks called out by the above work, in which it is stated that the "Aleuts" make voyages of 165 miles from their native island. The Professor had noticed them 1500 miles from home, in their frail boats, termed "Bydarkas." On motion a committee were appointed, consisting of Dr. Stout and Prof. J. Davidson, to draw resolutions of thanks to Capt. Scammon, for his interesting and valuable work "*on the Cetacea of the Western of North America.*"

Dr. Stout made some remarks upon the process of preserving zoological specimens by using carbolic acid. Followed by Prof. J. Davidson, who remarked that large fish thrown ashore on St. Paul's Island, were completely cleansed by a little crustacean, common on the island.

Professor Davidson presented two photographs of the sun, one taken by the Cambridge refractor, (a costly instrument and giving only a *three* inch image), the other by Mr. Clark's reflector, and instrument very recently invented, giving a *four* inch picture, and costing comparatively much less. Prof. Davidson illustrated the latter and described the new process of Mr. Clark's discovery. He considered it the most important improvement in sun photography in modern times, it having mostly been done since the last solar eclipse.

Dr. Blake called attention of the Academy to a remarkable hail storm occurring 12 miles south of Pleasanton, Alameda county, with great force, killing birds, followed by a smart shower attended with thunder and lightning, on the 12th of June.

Dr. Stout exhibited a specimen of basalt, being a portion of rock taken from a well on or immediately west of Russian hill in this city, at a depth of 100 feet. It was obtained by Mr. Holliday and presented by him to Dr. Stout, who made some observations of this remarkable occurrence of basaltic formation of the same character as the Giant's Causeway on the coast of Ireland, and the immense hexagonal crystals of basalt found at Petaluma. After penetrating this basalt water was struck in a stratum of pure slate rock, at a depth of 125 feet.

CALIFORNIA PHARMACEUTICAL SOCIETY.

Secretary's report of the fourteenth meeting, held June 13th, 1870. The President, Mr. Calvert, opened the meeting at 8 P. M. The minutes of previous meeting read and approved. Several new members were elected and the following gentlemen, honorary members: Wm. Proctor, Jr., Philadelphia; J. M. Maisch, Philadelphia; A. E. Ebert, Chicago. The Executive Committee made their customary report, through their Chairman. Among other items of interest presented to the meeting, were a box of herbs donated to the Society by Messrs. Wilson & Co., Botanic Druggists of Boston, Mass. The carefully prepared specimens were submitted to the examination of all present. The unanimous verdict was, that they appeared better than any sample of goods in the market. The thanks of the Society were ordered to be presented to Messrs. Wilson & Co. Mr. Steele suggested that immediate steps be taken to introduce these herbs, etc., among the California Pharmaceutists.

The Secretary read letters from Wm. Proctor, Jr., J. M. Maisch, Permanent Secretary of the American Pharmaceutical Association, and others.

Mr. Maisch, on behalf of the Executive Committee of the American Pharmaceutical Association, presented the California Pharmaceutical Society with a complete set of the Proceedings of the American Pharmaceutical Association. The thanks of the Society were unanimously expressed.

The Secretary, by resolution of the meeting, read that portion of Dr. Nichols' editorial letter, relating to "Cincho-Quinine," published in the Boston *Journal of Chemistry*, for

May. Considerable discussion ensued upon the subject matter of the letter and the doubts therein attempted to be thrown upon the analysis of Mr. Wenzell, the result of which had been presented at a previous meeting of the Society.

Results of the examination of "Cincho-Quinine" were mentioned by several members. They all agreed with Mr. Wenzell, particularly in noticing the absence of *Quinia*, and the great preponderance of *Cinchonia* in the "Cincho-quinine," manufactured by Messrs. Nichols & Co., of Boston. Meeting adjourned at 10 P. M., until the second Monday in July.

JAMES G. STEELE,
Secretary.

BIBLIOGRAPHICAL NOTICES.

Reports on the Progress of Practical and Scientific Medicine in different parts of the world. For the year beginning June 1st, 1868, and ending June 1st, 1869. Edited by HORACE DOBELL, M. D., Senior Physician to the Royal Hospital for Diseases of the Chest, etc., etc. London: Longman & Co., 1870. 8vo. pp. 645.

Doctor Dobell has given us a truly valuable book, and should certainly be congratulated on the success of his first volume. From the very nature of the task the first volume is the most difficult for the editor. Now that he has his plans and forces at least partially systematized and arranged, we may expect still more from the volumes that are to follow from year to year on a similar plan to the present.

"The design of the work is to bring together in the English language original and independent reports from all parts of the world, written by distinguished men resident in the countries which they represent."

One of the most interesting papers is a "Report on Mechanical Appliances, Instruments and Inventions in different parts of the world," by Heather Bigg, Associate of the Institution of Civil Engineers, etc. Another paper also of very great interest is the "Progress of Medicine in the United Kingdom of Great Britain and Ireland."

The improvements in medicine are found here condensed in the one volume, all countries being pretty well represented except America. The writer was anxious that America should be well represented, and hoped to be supplied with the necessary material from our new society in New York, whose object is to report the progress of medicine. The society, however, was too young to be available for this volume. The result is we have but two papers from this country, one by Dr. Brewer Mattocks, of St. Paul, Minnesota, on the "Climatology of Consumption with special reference to Minnesota," and one by Dr. A. Ruppaner, of New York, on "Laryngoscopy and Rhinoscopy," the former of which is rather a one-sided, unscientific affair.

Altogether, the doctor has done his work well, and has performed a most valuable work for the profession; it remains for the profession to do their part, viz: To buy and read the work, else the editor's labors are lost.

Anatomy, Descriptive and Surgical, by HENRY GRAY, F. R. S.

The fifth edition of this now quite indispensable manual of anatomy, has just passed through the press of Henry C. Lea, of Philadelphia. The work is too well known and appreciated by the profession to need any comment. No medical man can afford to be without it, if its only merit were to serve as a reminder of that which so soon becomes forgotten, when not called into frequent use, viz., the relations and names of the complex organism of the human body. In this work they are brought into such relation, that the cuts, 462 in number, cannot fail to impress the mind with these, as geography is taught by the atlas, the name and the locality being impressed upon the memory through the eye at the same time. The present edition is much improved by collecting the matter on General Anatomy in an introductory chapter. There is added also a description of the chief processes of the development of the ovum, and of the structures characteristic of the fœtal state. For sale by A. Roman & Co.

IMMUNITY FROM SEPTIC INFLUENCE OF MALIGNANT SCARLET FEVER DURING THE PARTURIENT STATE.

Mrs. F., was delivered of her fourteenth child on February 2nd. One of her children was at that time lying dead in another room from malignant scarlet fever; another, two and a half years old, suffering from the disease, I found the day after labor in bed with the mother; and another, four and a half years old, lying at the end of her bed in a cot, on the following day had a convulsion, succeeded by rash, and the disease in a malignant form. The mother—a very self-willed woman, got up, against all remonstrance, on the fifth day and refused to allow the children to be removed, with the invariable reply that providence would support her, and that it was her duty. The two children died—one on the sixth, the other on the eleventh day after the parturition of the mother, who passed intact through the contagion and is now well.—*Brit. Med. Jour.*

GEO. F. JENKINS, M. D., of Sandusky, Iowa, reports in the *Medical and Surgical Reporter*, a successful case of treatment of snake bite by the use of Spirits Ammon. hypodermically. If this method should prove to be equally efficacious as that by transfusion, as introduced by Prof. Halford and fully detailed in another column, it would simplify the treatment of snake bites so as to put the remedy in the hands of every man who lives in a country infested with poisonous reptiles.

California Medical Gazette.

SAN FRANCISCO, JULY, 1870.

☞ *All Letters and Communications to be addressed to the "Editors California Medical Gazette, care of A. Roman & Co., San Francisco."*

MEDICAL COLLEGES.

The prevailing opinion in the profession on this coast has been that the time was not yet when the clinical advantages needed to educate young men to a knowledge of the healing art were sufficient to justify the undertaking. When one remembers the well ordered hospitals of the East, around which the zeal and learning of the medical profession have gathered, and to which they have given the lustre of great names; in whose wards were to be found diseases so grouped and classified, as to furnish to the student opportunities to recognize the various forms of disease not only, but every modification and complication of diseases that are to be met with in the ordinary experience of professional life, it becomes difficult to understand how young men with the ordinary ambition that is found in every craft, should be content to avail themselves of such advantages as are to be found in San Francisco, to acquire a knowledge of all that is necessary to make a respectable practitioner. Any one who achieves that distinction under such circumstances, must be possessed of a great degree of native talent with a well-trained mind, and will deserve, as he should receive, the highest consideration at the hands of the profession.

There is perhaps no one thing that has done so much to degrade the medical profession in the United States as the number and rivalry of medical schools, not so much by their teaching, for of this we cannot have too much, as by deluding young men into the idea that they are qualified for the grave responsibilities of practitioners, and then deceiving the public by conferring upon them the degree of Doctor of Medicine. Perhaps the evil is inseparable from the confusion that attends the formative stage of society, and it is doubtless true that schools of medicine share with all other technical institutions in some of the evils that arise from the same cause. Half of the vast extent of country now known as the United States has been peopled within the memory of men now living; mighty cities have arisen with all their complication of associations, universities, and corporations, where the still living trapper hunted the beaver. Medical schools like all others are a necessity, and their proper location is in populous commercial cities, but a medical school cannot be considered otherwise than as an evil, unless its teachers shall be men competent to teach, fully imbued with a conviction of the responsibility of their position as well to their pupils as to the profession and the public at large. To that end there should be some way to control the appointment of its corps of teachers, so as to secure competent men, men that shall be recognized as worthy by the profession, and not leave it to voluntary association of individuals, who may desire to make use of the formidable name of College to advertise some specialty, which they only lack the courage to do, in a way more palpably in violation of the moral sense of the profession.

The first requisite of a medical college is a good hospital with ample facilities for clinical instruction, and none should receive the slightest consideration which has not this advantage. The practice of medicine and surgery, though based upon certain sciences, is essentially an art and can only be taught like other arts, where they are practiced. Any school therefore pretending to give a full medical education that does not have the wards of a well regulated hospital at its service and control, is a swindle, and its professors should be classed with quacks, and all diplomas emanating from such source, should be treated with contempt. Their holders should prove themselves worthy by some other evidence before they should be received into the fraternity. When we have a school that commands the confidence of the honorable men in the profession, whose professors shall not trample upon its time-honored morals, who will free themselves from all connection with professional outlaws, mountebanks and charlatans of whatever name, all abortionists and other unworthy persons, and serve as a nucleus around which the good and gifted may gather and grow by the inspiration of good example, then will dawn a new era upon the profession in San Francisco, the light of which shall be seen throughout the Coast.

There never was a time more auspicious for putting our County Hospital on a proper footing for purposes of clinical instruction than at present. By a late act of the Legislature, the entire control of the Hospital has been put into the hands of a Commission of Medical men, and the only matter of regret is, that the appointments should have been so exclusively partisan in their character.

The Journal of the Gynæcological Society for June comes to us in mourning for the death of its illustrious friend, Sir James Y. Simpson.

THE INSANE ASYLUM.

There is no right-minded medical man in the State that is not gratified at the re-election by the new Board of Directors of the Insane Asylum at Stockton, of the able physician who has conducted the affairs of that institution for a number of years past. The Asylum and the crowd of its unfortunate inmates have suffered enough since the foundation of the institution from professional incompetence and political intrigues, and however much the public may regret the increase of the number of the insane within the walls, they cannot but be gratified at the evidence furnished by the retention of Drs. Shurtleff and Clark, of the sanity of the Directors.

QUACKERY IN ENGLAND.

If a degree in short always has been, and in spite of all the regulations which can be made, always must be a mere piece of quackery, it is certainly for the advantage of the public that it should be understood to be so. It is in a particular manner for the advantage of the universities that for the resort of students, they should be obliged to depend not upon their privileges, but upon their merit upon their abilities to teach, and their diligence in teaching; and that they should not have it in their power to use any of these quackish arts which have disgraced and degraded the half of them. * * * The great success of quackery in England has been altogether owing to the real quackery of the regular physicians. *Adam Smith.*

If the above was true of England when the author of "The Wealth of Nations" wrote, what shall we say of our own country at this day. It is true that the theory and practice of medicine have entirely changed since then, but is it not as true to-day as it was then, that the success of quackery in the country is owing to quackery in the regular physicians? Is it not true that the loss of confidence by the public in us, that is manifested in their employment of all classes of empyrics often in preference to the best physicians, is, in great part owing to the indifference of the profession to whatever affects its character and too great sensitiveness to whatever concerns its reputation? It is a great mistake to suppose that we are doing a service to the profession by concealing its faults. If we are not to do it through medical journals, where shall we do it? Let us "pluck out the beam that is in our own eye." Let us do justice to all, but let us begin at home. To him that deserves well at the hands of his brethren let due credit be given, and he that deserves to receive the condemnation of every honest man, let him get it. Let us show our courage by attacking wrong wherever we find it, though it be at the door of our neighbor. There is no manliness displayed in shooting our anathemas after an outlawed charlatan when he is beyond our reach, and we are beyond his to reply. The truth is that these stage-doctors that flourish for a time and disappear, would not excite our regular quacks indignation if they did not beat him at his own game. Society suffers from other evils as great, we do not wax virtuously indignant at these. If we should purify our own ranks we would be able to say of our own country, what Adam Smith said of his; "Our regular physicians in Scotland have little quackery, and no quack, accordingly, has ever made his fortune among us"

THE UNIVERSITY OF CALIFORNIA.

The Board of Regents of the University of California have agreed upon the choice of a President in the person of Prof. D. C. Gilman, of the Scientific School of Yale College. The action of the Regents has been deliberate, and gives universal satisfaction. It is not yet known that Prof. Gilman will accept the position, but the friends of the cause of popular education hope he will. Much of the success of any institution of learning depends upon the enthusiasm that can be infused into it by its head. The richest endowments of the University will be lavished in vain, where an earnest love of the cause of education is wanting, and an enthusiasm that shall surround its halls as with a spiritual atmosphere.

An application was received by the Regents from the "Toland Medical College," for admission as a department of the University. This application was referred to the Executive Committee, to report at the next meeting in July. It does not seem proper for us to forestall the action of the Regents in the premises. It is a matter that concerns deeply the medical profession on this coast, is of vital importance to that school, and of little less to the University. Heretofore that school has attracted little attention from the profession; it has been regarded in the light of a private enterprise, with feelings varied according to the prejudices or partialities of men.

We have great confidence in the sagacity of the Board of Regents, and that they will not adopt the school without proper safeguards to make sure that it shall properly represent the judgment of the medical profession, of which they are as capable of learning as we. If they use the same care as has been exercised thus far, we have no fear but its action will be sustained. The welfare of the University is synonymous with the cause of education in California, and a blow cannot be struck at the one without recoiling upon the other. We shall wait the expression of the opinions of the profession and the action of the Regents, and in our next have something more to say on this matter.

SIR JAMES Y. SIMPSON.

Almost synchronous with the sad intelligence of the death of Dr. Simpson, we received the

supplement to the May number of the *Journal of the Gynæcological Society*, containing his reply to Dr. Jacob Bigelow's second letter. The length of the communication forbids its insertion in the columns of the *Gazette*, but the following remarks from the *Medical Times and Gazette* of London, will be read with more than ordinary interest by medical men in California :

The last contribution of Sir James Simpson to our Medical literature lies before us. His life was passed in incessant work, varied by the turmoil of controversy, and it was in defending his just rights that, so to speak, he passed away. When, some time ago now, Simpson was presented with the freedom of the city of Edinburgh, the then Lord Provost, the well-known William Chambers, felt himself called upon to say something of the discovery of the ænesthetic properties of chloroform, and Simpson was bound to reply. This reply, dealing as it did with chloroform solely, excited however, considerable discontent in Boston, and elicited an answer from Dr. Jacob Bigelow, which was published in the Boston *Medical Journal*, although it was addressed to Sir James Simpson. This letter elicited a reply, which was published in our columns, and also in the New York *Medical Journal*, and we supposed the matter over; but the reply brought a rejoinder from Dr. Bigelow, and this, in its turn, a second letter from Sir James Simpson, apparently the last of the kind he ever wrote, for in it he complains of being a sad invalid, and which now lies before us. It is in no controversial spirit we undertake to comment on this last production of a powerful pen; we shall try to place matters in the fairest possible light. In the first place, therefore, let it be said that Simpson never did, nor did any well-informed person on his behalf, lay claim to the discovery of artificial anæsthesia. But that he did, in conjunction with two others, discover the virtues of chloroform, that this subject was immediately and successfully applied in surgical and obstetric practice, and that its convenience of application caused its use to become so speedily and generally diffused all over the world, except at Boston. This no one will venture to deny. It was this rapid and extraordinary success of chloroform inhalation which caused many to look upon Simpson as the author of anæsthesia, but he never arrogated to himself this title, nor did any well-informed individual do so for him. Were we to seek for the real author of anæsthesia, we should probably find him in the person of Sir Humphrey Davy, who discovered the wonderful effects of nitrous oxide gas, but we in England here are not disposed to dispute the claims of Dr. Wells to be its actual introducer into practice, any more than we are to disbelieve that in so doing he was hissed and hooted out of the theatre of the Massachusetts General Hospital, where, if we are to believe the "ether memorial" (which, bye the bye, we do not,) "the discovery that the inhalation of ether causes insensibility to pain" was "first proved to the world." But nitrous oxide soon fell into disuse, and the merit of reintroducing it into practice is again most undoubtedly the due of an American, who put himself to no small trouble and expense in making its value known here in London. Nobody disputes this ; neither do they dispute that Dr. Morton, on the suggestion of Dr. Jackson, was the first to use the vapor of sulphuric ether as an anæsthetic agent—not, however, in the Massachusetts General Hospital; and far be it from us to detract from the honor due to Dr. H. J. Bigelow for his courageous operation under ether in that Hospital. We are perfectly willing to give every one their just due ; but, on the other hand, we are not prepared to submit to overbearing claims. If we are to accept the Boston claims literally, we must look upon the introduction of chloroform not only as a special injustice to their school, but as an injury to the world at large ; whereas we are rather inclined to look upon the discovery of chloroform and the rapid spread of the practice of general anæsthesia as cause and effect. The process of inhaling ether was disagreeable, the resulting anæsthesia slow in making its appearance, the quantity consumed considerable, implying difficulty in stow age and transport, all obstacles to its general use. But chloroform changed all this. A denser, yet more volatile fluid, took the place of the other, and its use rapidly spread over the world. It has been contended that ether is safer, and that fewer fatalities (we believe there have been some, but for the sake of argument let us say none) have followed its use ; but this loses its significance if we reflect on the numberless cases in which chloroform has been used, cases fit and cases unfit, and compare these with the comparative rarity of ether inhalation. This much is significant enough ; chloroform, notwithstanding its dangers, has been hitherto accepted as the anæsthetic of the world ; ether, with all its boasted safety, has been deliberately set aside. These are facts, and facts speak for themselves. Simpson never claimed more than justice, we ask no more for him. Nor could there be a stronger assertion of the claim, or a more powerful series of arguments on its behalf than the pamphlet just published, the last words of Simpson, who being dead yet speaketh.

☞*Readers of the* California Medical Gazette *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received and acknowledged under "Communications received."*

MISCELLANEOUS.

MEDICAL COLLEGE CONVENTION.

The Delegates from Medical Colleges assembled in the Lecture-room of the Georgetown Medical College, corner of 10th and E Streets, Washington, D. C., on the morning of April 20th, 1870 ; and were called to order at 11½ o'clock A. M., by Prof. N. S. Davis, of Chicago. Prof. S. D. Gross was elected temporary Chairman, and N. S. Davis Secretary.

The first attempt to procure concert of action in the work of improving the system of Medical College instruction in this country, by a Convention of Delegates from Colleges alone, was made on Monday, preceding the meeting of the American Medical Association, in Louisville, in May, 1859, and was followed by a similiar meeting, the day preceding the assembling of the Association, in New Haven, in June, 1860. Less than a majority of the Medical Colleges in the country were represented in both of those meetings, and no attempt was made to effect any considerable changes in the methods of instruction. Circumstances beyond the control of the medical profession, prevented any further action in this direction, until the American Medical Association, during its session in Baltimore, in May, 1866, adopted a resolution, earnestly requesting the Medical Colleges of the whole country to hold a Convention of Delegates from their own faculties, and thoroughly revise our whole system of medical college instruction ; and appointed a Committee to aid in carrying the resolution into effect. It was in response to a circular issued by that Committee that a Convention of

Delegates from Medical Colleges assembled in Cincinnati, May 3d, 1867. Delegates were present from eighteen Medical Colleges, constituting little more that half the number then existing, and in active operation in the United States, and including several of the oldest and most influential character. Prof. A. Stille, of the University of Pennsylvania, presided, and Prof. G. C. E. Weber, of Charity Hospital Medical College, acted as Secretary. After three days spent in candid and full discussion of the whole subject, the following propositions were adopted by nearly an unanimous vote.

Having thus agreed upon a thorough revision of our whole system of Medical College instruction, the Convention adopted the following resolution, *viz*:

Resolved, That a Committee of five be appointed by the President, whose duty it shall be to present the several propositions adopted by the Convention to the Trustees and Faculties of all the Medical Colleges in this country, and solicit their definite action thereon, with a view to the early and simultaneous practical adoption of the same throughout the whole country. And that the same Committee be authorized to call another Convention, whenever deemed advisable.

In obedience to this resolution, the President appointed N. S. Davis, of Chicago; S. D. Gross, of Philadelphia; F. Donaldson, of Baltimore; Alden March, of Albany; and Geo. C. Blackman, of Cincinnati, to constitute said Committee.

As soon after the adjournment of the Convention as practicable, the Committee, in obedience to the foregoing resolution, prepared the following circular letter, and sent copies of the same to the Trustees and Faculties of every regular Medical College in the United States, the existence of which was known to the Committee at that time. The letter is as follows:

TO MEDICAL COLLEGES.

At the Convention of Delegates from Medical Colleges, called for the purpose of revising the system of Medical College Instruction in this country, and which convened in Cincinnati, May 3d, 1870, the following resolution was unanimously adopted:

"RESOLVED, That a Committee of Five be appointed by the President, whose duty it shall be to present the several propositions adopted by this Convention to the Trustees and Faculties of all the Medical Colleges in this country, and solicit their definite action thereon, with a view to the early and simultaneous practical adoption of the same throughout the country. And that the same committee be authorized to call another covention whenever deemed advisable."

The undersigned Committee, appointed for the purpose of carrying into effect the instructions contained in the foregoing resolution, respectfully invite the attention of the the Trustees and Faculty of ———— to the following five propositions, which, after mature deliberation, were adopted by the said Convention with entire unanimity:

"RESOLVED, 1st. That every student applying for matriculation in a Medical College shall be required to show, either by satisfactory certificate, or by direct examination by a Committee of the Faculty, that he possesses a knowledge of the common English branches of education, including the first series of mathematics, the elements of the natural sciences, and a sufficient knowledge of Latin and Greek to understand the technical terms of the profession; and that the certificate presented, or the result of the examination thus required, be regularly filed as part of the records of each Medical College.

2d. That every medical student shall be required to study four full years, including three regular annual courses of Medical College instruction, before being admitted to an examination for the degree of Doctor of Medicine.

3d. That the minimum duration of a regular annual lecture term, or course of Medical College instruction, shall be six calendar months.

4th. That every Medical College shall embrace in its Curriculum the following branches, to be taught by not less than nine professors, viz.: Descriptive Anatomy, including dissections; Physiology and Histology; Inorganic Chemistry; Materia Medica; Organic Chemistry and Toxicology; General Pathology, Therapeutics, Pathological Anatomy, and Public Hygiene; Surgical Anatomy and operations of Surgery; Medical Jurisprudence and Medical Ethics; Practice of Medicine; Practice of Surgery; Obstetrics, and Diseases of Women and Children; Clinical Medicine and Clinical Surgery; and that these several branches shall be divided into three groups or series, corresponding with the three courses of Medical College instruction required.

The first or Freshman series shall embrace Descriptive Anatomy and Practical Dissections; Physiology and Histology; Inorganic Chemistry and Materia Medica. To these the attention of the student shall be mainly restricted during his first course of Medical College instruction, and in these he shall submit to a thorough examination by the proper members of the Faculty, at its close, and receive a certificate indicating the degree of his progress.

The second, or Junior series, shall embrace Organic Chemistry and Toxicology; General Pathology, Pathological Anatomy, Therapeutics, and Public Hygiene; Surgical Anatomy and operations of Surgery; Medical Jurisprudence and Medical Ethics. To these the attention of the medical student shall be directed during his second course of Medical College instruction, and in them he shall be examined at the close of his second course, in the same manner as after the first.

The third, or Senior series, shall embrace Practical Medicine; Practical Surgery; Obstetrics, and Diseases peculiar to Women and Children; with Clinical Medicine and Clinical Surgery in a hospital. These shall occupy the attention of the student during his third course of College instruction, and at its close he shall be eligible to a general examination for the degree of Doctor of Medicine.

The instruction in the three series is to be given simultaneously, and to continue throughout the whole of each annual College term; each student attending the lectures on such branches as belong to his period of progress in study, in the same manner as the sophomore, junior, and senior classes each pursue their studies simultaneously throughout the Collegiate year in all our Literary Colleges.

5th. That every Medical College should immediately adopt some effectual method of ascertaining the actual attendance of students upon its lectures and other exercises, and at the close of each session, or of the attendance of the student, a certificate specifying the time and the courses of instruction actually attended, should be given, and such certificates only should be received by other Colleges as evidence of such attendance."

To remedy the effects of having accidentally omitted any Schools, the same letter was published in most of the medical periodicals at the same time. To the circular letter thus addressed and its plain questions, official answers were received from the Faculties of only ten Medical Colleges, while the number then in active operation was over thirty.

The ten replies mentioned were from the Medical Department of Harvard University; the Medical Department of Yale College; the Jefferson Medical College; Medical Department University of Michigan; Miami Medical College, Cincinnati; Medical College of the State of South Carolina, Charleston; Humboldt Medical College, St. Louis; Toland Medical College, San Francisco; Medical Department of Willamette University, Salem, Oregon; and the Chicago Medical College, now Medical Department of the North-Western University.

Of the ten Colleges replying to the circular, we insert the following. The first is from the Medical School of Yale College, and to it we invite particular attention from our readers:

NEW HAVEN, *April* 6, 1868.

N. S. DAVIS, M. D., *Chairman of Committee of Medical Teachers' Convention.*

Dear Sir:—The circular issued by your Committee, presenting to the Faculty of the College the several propositions adopted by the Convention of Medical Teachers held last year, and soliciting definite action thereon, to the end that they may be simultaneously and practically adopted throughout the whole country, has been fully considered by the Faculty; and the undersigned have been directed to transmit to your Committee the following reply:

In doing so, however, we cannot neglect this opportunity of expressing, both for our colleagues and ourselves, our active sympathy with every well-considered movement, having for its object the improvement of the profession; and particularly the elevation of the standard of education, both general and professional, which is necessary to secure admission to its ranks; and our high appreciation of the efforts of the gentlemen engaged in the recently renewed attempt to attain that object—for it is a work that this College, ever since its formation, has been actually engaged in. The relations which this Institution sustain to the Connecticut Medical Society, by which it was originated, and to the State Legislature, by which it was chartered and made one of the Departments of Yale College, are such, that any radical change in its plans of instruction cannot be suddenly or easily effected. This is not the first occasion on which this College has been solicited to change entirely its *curriculum* of study, as well as the pre-requisites for graduation.

More than forty years ago, as doubtless your Committee are aware, the Connecticut Medical Society sent representatives to a Convention of Delegates, from Medical Societies and Colleges, held at Northampton, pursuant to a call issued by the Medical Society of Vermont, for the purpose of devising plans for elevating the character of medical education.

After discussing the various subjects which had been suggested by the circular of the Vermont Society, and such as were proposed by members of the Convention, certain regulations (twelve in number) were adopted, together with by-laws and resolves, providing for making known to the several Medical Colleges and Societies of the United States the results of their deliberations—offer their ratification of them.

As your Committee are doubtless familiar with the proceedings of the Convention, it is unnecessary to do more than to allude to the very clear and forcible presentation of the argument by which their propositions were enforced, or to enter into a detailed statement of the changes proposed, further than to mention that "each candidate for a license to practice, or for the degree of Doctor of Medicine, was required to present satisfactory evidence that he had received from some respectable College the degree of Bachelor of Arts; or that *previous to the commencement* of his professional studies he had acquired a good English education; and such knowledge of the Latin language as to enable him to read with facility the Æneid of Virgil and the select Orations of Cicero; and that he had also obtained a good acquaintance with the principles of Geometry and Natural Philosophy." Such students as were regular graduates of Colleges, were required to study for *three* years, and attend two courses of public lectures—those who were not graduates of Colleges, were required to study *four* years.

The records of the Connecticut Medical Society show that it adopted unanimously the recommendations of the Convention; and entering at once and heartily into the movement, to advance the standard of medical education, it procured at some trouble, the necessary alterations of the laws of the State, and the charter of the Medical College, so as to conform them to the new system. The Faculty earnestly seconded these efforts, and their action was made to conform to the standard demanded by the Northampton Convention, in 1827.

The new system was faithfully pursued by this College for three consecutive years, and until it became evident that the solemn compact was no longer regarded by the other Medical Colleges represented in the Convention, or who had subsequently signed the agreement. One after another they refused to be bound by their own regulations, until finally this Institution, according to the traditions of the fathers, found itself standing alone—"faithful among the faithless,"—in the combined effort to advance the true interests of medical education in the United States.

Seeing that the students were attracted away to other institutions, which practically ignored the new regulations to which they had all pledged themselves, and finding that a longer perseverance in the extended course of instruction would not only injure the Institution, but would fail to be of any benefit to the cause of medical education, the Connecticut Medical Society, in 1832, voted "that the Committee on the term of study report to the General Assembly a bill, in due form, for a public Act, to alter the term of study, making the time required the same as by the law in force previous to the Convention, in 1827." The bill, as presented, became a law the same year, and the *term of study* in this Institution has remained until the present time unchanged.

In regard to the *third* question of the circular, then, we have decided to answer in the negative.

In reply to the *second* question, we are convinced that although the propositions of the Committee are in themselves unobjectionable, they are inadequate as a remedy for the great evils of the present system of education.

The great salient evils of this system are, in our opinion,

1st. The almost total absence of *adequate preparatory education* in the young men who enroll themselves as students of medicine.

2nd. The fact that the greater portion of these receive no instruction whatever worthy of the name, nor indeed accomplish *any systematic study*, in the proper sense of that term, *before* they listen to public lectures—if they ever do.

3rd. Too great prominence is already given to public lectures, and to little to *daily text-books recitations*.

And the student who comes fresh from the plough and the work-bench, with only the preparatory education which the district school affords, or the shrewdness acquired in some business pursuit, receives his degree after the same term of

study as is required of the most thoroughly disciplined graduate of a University.

Such a palpably gross evil as this requires no comment. In order to remedy, so far as its influence could reach, the *first* evil enumerated, the Connecticut Medical Society, many years ago, resolved, in substance, that hereafter no young man should be received into the office of any of its members, as a student of medicine, until he had passed a satisfactory examination, by his instructor and a Fellow of the Society, in the leading branches of English education; also in the Greek and Latin languages—in effect, very nearly the examination that was then required for admission into the Freshman Class in Yale College. This was placing the standard so far above the demands of the public—of the other Medical Colleges, and even of the profession generally, that the law soon became inoperative, and so continues, although we hope it will yet be revived.

Third.—The system of teaching medicine by daily text-book recitations and familiar lectures, through a large part of the year, which is in operation in Yale College, in addition to the course of public lectures and Hospital facilities, we believe to be the only proper one. No student should be graduated *anywhere*, unless his studies have been faithfully and systematically pursued, under circumstances that insure the full occupation of his time, to the exclusion of all other business, and under the direction of a competent teacher. If a student thus educated can only be admitted to graduation after three years of constant application, *when* ought those to graduate, who read medicicine as the majority do without recitationsof any kind, and with only nominalinstruction.

It is not an extension of the lecture term to six months, nor yet a great multiplication of the subjects of study, that can diminish, much less remove the great evils that we all feel do exist. The only change that can reach them is the absolute requirement of greater preparatory knowledge; and the adoption of the mode of daily teaching in classes, in public institutions, instead of the loose and indefinite one that now so universally prevails in the offices of physicians.

As evidence, if any were needed, of our desire to advance as far as practicable, the standard of medical education, we will mention the fact, already known to our Committee, that we have it in contemplation, at no distant day, to perfect plans already in process of completion, by which the Medical Sciences will be taught here as the other Sciences are taught, to graded classes, by daily text-book recitations and lectures, throughout the Academic year. In a democratic country like ours, where educational interests are in sense fostered or controlled by a central government, and where the quality of education, as of other things, is regulated by the public demands, the attempt to bring all Medical Colleges to adopt the same greatly advanced and prolonged course of study, and to compel all students to come up to that standard, *before the public mind is sufficiently educated to appreciate and demand it*, is in our judgment premature, and not likely to prove successful.

While for these and other reasons the Faculty deem it inexpedient to adopt at present the recommendations of the Convention, they will be prepared to give them a favorable consideration, and to adopt them, so far as our circumstances will allow, *whenever they are adopted and faithfully adhered to as the uniform and settled practice of the leading Medical Colleges of this country.*

Appreciating fully your zeal and devotion in the cause of medical education, which we ourselves have so much at heart, and hoping to see the day when your ideal in this regard may be realized, we are, with great respect and esteem, respectfully yours,

S. G. Hubbard, M. D.,
M. C. White, M. D., } *Committee of Faculty.*

San Francisco, *October*, 16*th*, 1870.

To N. S. Davis.

Dear Sir:—I am instructed by the Trustees and Faculty of the Toland Medical College to acknowledge the receipt of your circular, on the subject of medical education, and to inform you that they most heartily approve of the resolutions set forth, and hereby agree to adopt them, as soon as the same course is pursued by the Colleges named in your circular. Very respectfully and truly yours,

Thomas Bennett, *Dean.*

[Concluded in our next.]

CHLORAL IN PHTHISIS.

What has struck me with regard to the hypnotic effects produced by Chloral, is the fact pointed out by Liebreich, that it causes sleep without exciting the pulse or respiration. In the majority of cases, it produces no excitement or uneasiness, nor is it followed by headache, furred tongue, or feeling of depression. With a few exceptions, indeed, it seems, in moderate doses, to occasion natural sleep.

Under its influence, I have seen rabbits motionless, breathing tranquilly, and evidently fast asleep, who could be roused so as to take a few steps, or eat a little cabbage, and then, overcome by drowsiness, fall asleep again. The same power of being aroused from a moderate dose occurs in the human subject. No doubt the somnolence may be augmented by increasing the dose, until it becomes soporose or comatose, when stimulants fail to rouse. Of the intensity of this last effect in man, however, little is known; but from what has been observed in the lower animals, there can be little doubt that sufficient coma can be produced to admit of operating without pain. Whether however, chloral is so easily manageable as ether or chloroform, remains to be seen.

The qualities I have described render chloral highly serviceable to the physician. Although in a few instances it has occasioned excitement before sleep, and headache afterwards, in the majority of cases it is not a narcotic but a pure hypnotic. The ill effects so common in the administration of opiates I have not witnessed on giving chloral at all. For example the pupil is not contracted more than in ordinary sleep. There is not, for the most part on waking, the confusion of head, the sense of depression, the furred tongue, want of appetite, nausea or vomiting, suppression of the secretions or constipation, so common after giving opiates. It therefore occurred to me that it would be a most useful hypnotic in phthisis. Thus it too frequently happens that cough, pains in the chest, and restlessness at night, if alleviated by opiates or by that excellent preparation chlorodyne, leave the patient so depressed, feverish and weak, as to do more harm than good. Indeed in my own practice I have found that such is the loss of appetite, increased weakness, and emaciation that follow their use, that I never give them except in the last stages of the disease, and when all hope of prolonging life having ceased, we choose the least of evils in procuring even unhealthy sleep. But matters are greatly changed when we are able to obtain the natural sleep that Chloral produces. By its aid we can lull irritation, and give

rest for a time, in many cases, without any injury whatever. I have recently made special observations on this point in nine cases of phthisis now under my care in the clinical wards, and have collected the experience of some of my colleagues.

I think that it will be admitted that no kind of opiate would have produced such uniformly good, and so few bad results in twenty-one cases of phthisis, as is here shown to have been the effects of Chloral. In three cases individuals slept well habitually and the remedy only intensified sleep without effecting the head, tongue, or appetite. In one case, in addition to cough and restlessness at night, there was considerable sweating which was much alleviated by the Chloral. To assure myself of this fact, it was given ten nights running, always producing good effects, and when stopped, the sweating increased. In one case it produced excitement and a state approaching delirium, but the dose was thirty grains. In one case the same dose caused slight headache in the morning. In one case also the tongue was more furred afterwards. In all the cases the relief to the cough and restlessness, with the production of sound sleep, was most marked, while the head, tongue and appetite were in no way affected. For the same reasons that Chloral is useful in phthisis, it has been found beneficial in certain cerebral diseases, in which opium is contra-indicated. In another class of cases, however, the valuable qualities of the latter drug in checking secretion while acting as a sedative, will give it superiority. I refrain however from entering into a consideration of the numerous diseases in which the drug has been administered and recorded by Liebreich and several others. The first step it appears to me, ought to be a determination of its physiological action ; and this, so far as experiment and observation have yet gone, points to its being, in moderate doses of twenty to thirty grains, the purest hypnotic we possess ; in doses of thirty to sixty grains, it causes excitement, giddiness, and headache more frequently.—J. H. BENNETT, *in Practitioner, for May last.*

FURTHER NOTES ON THE USE OF CHLORAL.

Letter from Dr. H. Bence Jones.

SIR:—In a letter which I have lately received from Dr. Oscar Liebreich, he gives me some further information on the treatment of disease by the hydrate of chloral. I hope he will, before long, have some important facts on the use of the hydrate of bromal, to communicate to your readers.

I have in no case used more than 60 grains of chloral for one dose. Dr. Liebreich states that 200 grains may be given for one dose. I have never used it as an injection beneath the skin. He has used it in 7-grain doses frequently. He tells me he has given it every night for three months, without any loss of its property of causing sleep. I have only given it for a few nights consecutively. The largest quantity I have given in the shortest time has been 150 grains in six hours, for the most intense neuralgic pain with violent gout in the foot. Between the first and second dose of 30 grains there was only one hour, afterwards two hours. Broken sleep of nearly ten hours was produced, and entire forgetfulness of the pain and of the time, so that the two days were thought to be only one. No bad symptom was produced, but there was no great good done to the gout, although the neuralgia was taken away.

In a patient who was liable to gouty sciatica and had frequently got instant relief from the subcutaneous injection of morphia, I tried what doses of 30 grains of hydrate of chloral would do. Two doses with an hour's interval gave sleep for many hours. A third dose was then taken, and it caused heaviness of the head and drowsiness the greater part of the next day. The sciatica was stopped.

Epileptical headache returning at very irregular intervals has been stopped over and over again in one patient, by a dose of chloral that caused eight or ten hours' sleep. Large doses of bromide of potassium were given daily for weeks, with great good effect in preventing the frequency of the attacks, but no medicine and no alcohol was able to stop the headache when it began, until the chloral hydrate was tried in September, 1869. Since that the patient has rapidly got better, and now takes only a very small quantity of bromide and very rarely uses the chloral. Even the epileptic convulsion may be stopped by the chloral, if I may believe the report I get of one patient.

The rapidity of action of the hydrate of chloral is very great when the stomach is quite empty. It is very different when the medicine has to wait for the solution of the food. Probably it acts much more rapidly when given in sugar and water than in mucilage of gum. Over and over again I am told that it causes sleep in less than five minutes. A patient who for years had habitually taken opium, slept all night with 30 grains of hydrate of chloral. Two patients who were accustomed to take full quantities of brandy, when given the hydrate of chloral to cause sleep, declared that they were obliged to give up the brandy, as it caused oppression of the chest and head. They got good and full sleep with 30 grains of chloral, but after some days they chose to give up the chloral and return to the brandy, saying they could not take both at the same time.

With regard to any bad effects of the medicine, I may almost say that I have met with none at all. The very strong taste, which soon goes off, has frightened two or three patients, and they have objected to any further trial of the medicine, saying that it heated and headached them. Some of the cases of neuralgia in which I have used it, have not lost the pain nor slept as I expected. When it has been taken in the early morning or in the day—when disturbing causes have prevented sleep—I have been told of uncomfortable headache, lasting for many hours, but I have never heard of sickness nor constipation nor even loss of appetite, in the great number of cases that are within my own knowledge. Many patients, after eight or ten hours' sleep from a 30-grain dose, have thought themselves lower and weaker than they would have been if they had not taken the chloral the previous night, but neither the pulse nor the tongue showed any confirmation of their sensations. I have had two very aged patients cause alarm to their friends by the long and sound sleep which 30 grains of the hydrate gave when other remedies had failed. That a medicine should be able to do so much good without doing any harm is so contrary to the ordinary therapeutical law, that the suspicion will arise that more has to be learned about it.

With regard to the mode of action of the hydrate of chloral, perhaps Dr. Liebreich may be led to change his present opinion. The discovery of the effect was made by means of a beautiful idea. If it could be shown that the alkali of the blood is sufficient to decompose the hydrate of chloral, and that the chloroform combines with Dr. Liebreich's protagon of the nervous substance, forming a temporary compound, less capable of the peculiar motion of the nervous substance than the nerve substance itself, Dr. Liebreich would have made a noble advance in therapeutical rationalism ; but

the hydrate of chloral is not easily decomposed by weak alkaline solutions, even at the boiling temperature, and it is very possible that the hydrate of chloral acts as such, and not altogether or at all as a generator of chloroform. Possibly new chlorals and other compounds of chloral than the hydrate, may, by their actions, give more knowledge as to the mode by which the hydrate of chloral produces its effect.

Meanwhile, there is some fear that variations in the preparation may cause uncertainty in the effects produced, and the enormous demand that now exists may lead to the sale of hydrates of chloral that may have very different actions from that hydrate of which I have been writing.—*Medical Times and Gazette.*

REMOVAL OF THE UTERUS AND ITS APPENDAGES.

At the meeting of the Imperial Academy of Medicine in Paris on the 7th inst., M. Pean presented a woman on whom he had successfully performed a very formidable operation. The patient had a large multilocular ovarian cyst, for the removal of which M. Pean proceeded to perform ovariotomy; and, after having removed the greater parts of the cyst piecemeal, he found that it was impossible to remove the part which was adherent on the pelvis and to the uterus. The adhesions broken through in the course of the operation were very vascular, and there was much hemorrhage, which was arrested by the actual cautery. M. Pean found, further, that there was a very large fibroid tumor of the ovary on the other side; and the uterus was hypertrophied and soft. He therefore removed the uterus by passing into vagina, from the abdomen, a double thread, one ligature of which was made to embrace the ovarian cyst, and the other (on the right side) the uterus with the corresponding portion of the vagina, and the ovary and Fallopian tube of that side. The ligatures having been tied, M. Pean cut off all above them. The wound in the vagina united completely; and the parts to which the ligatures were applied escaped by sloughing through the abdominal walls. When the woman was shown to the Academy, the abdominal wound had healed, and she was quite well. In making the communication, M. Pean stated that he now had performed ovariotomy in ten cases, seven of which had been successful. Two of the fatal cases occurred in aged subjects.—*British Med. Journal.*

THINGS NOT GENERALLY KNOWN.

The *Pharmaceutical Journal* publishes a remarkable instance of unforeseen danger arising from the facility with which oxide of silver is reduced by contact with vegetable extracts in common use. A medical man prescribed twenty-four pills, each containing two grains of the oxide of silver, a twenty-fourth of a grain of muriate of morphia, and a sufficiency of extract of gentian: the pills being coated with silver in the usual manner. The pills were delivered to the patient in an ordinary pill box, but the lady, being in her nursery, and having no pockets in her dress, placed the box in her bosom, probably next the skin. In three-quarters of an hour an explosion occurred, her under-clothes were reduced to tinder, and her right breast was seriously hurt. The patient fortunately had presence of mind enough to seize the part with both hands, and thus extinguish the flame. We learn from Mr. Hills that a similar occurrence has been known in compounding the extract of colocynth with the oxide of silver, and that with creasote or the oil of cloves this salt is reduced to the metallic state, with the production of heat amounting often to an explosion. In fact, many of the essential oils reduce the oxide of silver, and one of the processes for silvering glass is founded on the fact, oil of cloves being usually employed in the operation. We may mention that when glycerine and permanganate of potash come in contact, heat is evolved, sometimes resulting in flame. An instance has occurred in which a wound was covered with the glycerine of starch, and then sprinkled with powdered permanganate of potash, when the heat produced became unbearable.—*Lancet.*

THE AMERICAN MEDICAL ASSOCIATION.

We extract the following from an editorial in the *Richmond and Louisville Medical Journal:*

"The Association is to meet next year in San Francisco. For two blessed years those in the United States (of former times) are not to hear any more of it, or from it, or to be any more troubled with it! Whether the Association goes to San Francisco to admit the negro, or to admit the Chinaman, or some of Dr. Bell's friends, the Scandinavians, there resident, or to indulge in penitential seclusion for late gross misdemeanors—misdemeanors greater than those ever observed at the ward meetings of small-beer politicians—who can tell? As a Body, it has forfeited all right to allegiance, to respect, to recognition as a ruler, counselor or guide, Where it goes or when it goes, where it stops or whether it ever returns, are unquestionably, to nine-tenths of the profession, questions of profound indifference. If it is pleased with junketing across the country at half rates; if it is pleased with the Pacific slopes; if it finds employment sufficiently lucrative there, to warrant a permanent emigration, all who wish it well will be pleased to have it do what will please and profit it. The thoughtful and best men in the medical profession feel that the mission of this body has grossly, ruinously, ludicrously failed. It is simply now a question of time, reflection and active co-operation for the creation of an efficient, active, fearless Body, which shall supersede that nerveless, anomalous, 'spineless' organization —the American Medical Association."

THE REQUIREMENTS OF A LONDON MEDICAL STUDENT AND PRACTITIONER.

Before the London medical student is ready to practice he is required to show a higher standard of preliminary education, a much longer course of study, than with us. Clinical teaching is now strictly enforced, and in every way more money must be expended before the student is ready to practice than in America. When the course is completed and diploma obtained, either from the Royal College of Surgeons of London, Dublin or Edinburgh, without which he cannot be "registered," he must wait about ten years before he can obtain a supporting practice. It pays well when the practice is obtained. The fee of a London physician of any note is not less than one guinea; and two guineas is not considered exorbitant when he is well established.—*N. Y. Medical Record.*

THE invention of soda water is ascribed to Dr. Hawkins, of Philadelphia, a blind chemist, who in 1812 made the first soda fountain in this country.

ORIGINAL COMMUNICATIONS.

DIABETES.

By James Blake, M. D.

The following cases of Diabetes, which have come under my care during the last few months, are published as offering some peculiarities which may render them interesting. I shall not attempt to discuss the various theoretical views that have been brought forward from time to time, to explain the formation of sugar, or the guesses as to the organ in which this formation takes place; nor shall I allude to the chemico-physiological theories which have been adduced to explain the reason why such large quantities of sugar are excreted by the kidneys instead of being burned off in the lungs.

Up to the present time, I believe no satisfactory theory as to the pathology of the disease has been brought forward, and as regards our therapeutics, the numberless remedies, chemical, physiological and empirical, that are constantly being lauded for its cure, is sufficient proof that our therapeutics are not in a more satisfactory state than our pathology.

The first case I shall relate is that of Mr. W.; age 44. Has always enjoyed good health until the last four months—in fact, had not had a day's sickness for years. Ordinary weight 275 pounds; large frame; active habits. He came under my care in the beginning of January, 1870. Four months ago, first noticed that he was more thirsty than usual and that his skin was dry; but at this time he had not lost weight. During the month of November he became very feverish, lost his appetite but had great thirst, and now noticed that the quantity of urine was much increased. During the month he lost 40 pounds in weight and became very weak, but still able to keep about. Since that time he has been gradually getting weaker and losing flesh; present weight 210 pounds; skin hot and dry; pulse 92; tongue coated; bowels costive; appetite not very good; great thirst; passing three gallons of urine daily; sp. gr. 1042; urine strongly charged with sugar, as indicated by the bismuth test and also by the palaroscope. As I had lately employed the opium treatment in a case and had not been satisfied with the result, I determined to treat this case simply by excluding all amylaceous and saccharine substances from the diet. I adopted the plan with more confidence as my patient was one of the earlier settlers in the country, and had been accustomed to a diet often consisting principally of animal food. The only medicine given was a mixture, containing aloes and about five grains of bi-carbonate of potash to the dose, for the purpose of regulating the bowels. Two or three ounces of whiskey were allowed daily and claret at dinner. The whiskey was given, as the patient had been accustomed to use a considerable quantity, although not of intemperate habits. The diet consisted of meat, roasted or broiled, green vegetables, water cresses, eggs and milk, tea without sugar. It was well relished, the appetite soon improving. Warm salt water baths twice a week. There was a rapid diminution in the urine and sugar, so that at the end of three weeks the quantity was two quarts in the twenty-four hours, sp. gr. 1.0016, and merely producing a browning with the bismuth test. At the end of six weeks, all trace of sugar had disappeared from the urine, the skin perspired freely, and rapid increase in weight took place. At the end of two months, bread was allowed, although there was no craving for it, and after two weeks more, ordinary diet, including sugar and potatoes was taken, without a trace of sugar appearing in the urine. Mr. W. left the city, to return home at the end of March, having gained 20 pounds in weight during the last six weeks. I heard from him about three weeks since; he was then quite well and had gained about 15 pounds since he left the city.

Mr. M. consulted me towards the end of November, on account of psoriasis of the legs, which appeared about four months ago and has resisted treatment. His general health is not much affected, although he says he has lost strength and flesh since the disease appeared; appetite pretty good; tongue coated and cracked; bowels constipated; skin dry. The legs are covered with scaly epidermis, which is shed in large quantities. The skin is red and the irritation is very troublesome, particularly at night.

The case was treated with arsenic and alkalies, then with Donovan's solution, milk diet, then with nitric acid and alkaline baths, but without any improvement. Having seen a notice in the medical journals of the successful treatment of the disease by an exclusively animal diet, I thought it probably might be connected with diabetes, and although the patient had no great thirst and passed about the natural quantity of urine, I found on testing it that it contained a considerable quantity of sugar, sp. gr. 1.0026; black precipitate with bismuth test. Mr. M. was now put on a meat and green vegetable diet; aloes and bi-carbonate of potash to regulate the bowels; warm salt water baths; all other medicine was discontinued. At the end of three weeks there was a marked improvement in the state of the legs, and in five weeks after commencing the treatment, he left the city, the legs almost well and without a trace of sugar in the urine.

I am not aware that any connection between psoriasis and a saccharine state of the urine has been found to exist, but this instance and also the fact of the successful treatment of the skin disease by an animal diet, should lead to further researches in this direction.

Mr. J., age 43. Has always enjoyed good health until about four months ago, when he suffered from an abscess about the mastoid process of the temporal bone, on the left side. The abscess eventually broke into the ear, with some relief to the pain, which had been intense; since then, the abscess has been gathering and discharging at times through the ear, causing great pain; soreness of the muscles attached to the base of the skull and pain of the whole of the side of the head extending to the vertex. About the same time, he was troubled with great thirst and the quantity of urine passed was increased. When he came under my care in the beginning of May, he had been already under treatment for diabetes, by a partially restricted diet and the administration of opium, but the physician who had been attending him had informed his friends that the disease must terminate fatally. The case certainly was not promising, for in addition to the diabetes there was the abscess at the base of the skull, keeping up a constant drain and interfering with the patient's sleep and exercise, on account of the pain it caused in movements of the head. The urine passed was between two and three quarts a day, sp. gr. 1.036, giving a strong saccharine reaction; pulse 120; skin dry; tongue coated but red at the edges; appetite and digestion good; great thirst; bowels constipated; inability to sleep without opiates; gradually increasing weakness. Mr. J. had lost 58 pounds in weight, his health weight being 175 pounds and his present weight 117 pounds. On coming under my care, I immediately stopped the opiates, kept the bowels regulated by a mixture of aloes and bi-carbonate of potash, had recourse to chlorodyne to procure sleep, and ordered a strictly meat and milk diet, with green vegetables, water cresses, eggs, buttermilk, and a small portion of strawberries. An incision was made over the mastoid process down to the bone, in order to give a freer exit to the pus and to prevent its causing violent attacks of pain and fever, which always followed when the discharge from the ear had been arrested for a few days. Rapid improvement followed. In two weeks the quantity of urine had diminished one-half, sp. gr. 1.032, and the bismuth test only gave a brown reaction. At the present date, July 15th, the urine is reduced to about the natural quantity, and when no fruit is taken, is almost free from sugar. During the last six weeks he has gained 8 pounds in weight and is fast recovering his strength. The discharge from the abscess at the base of the skull is much diminished and of a better character; skin soft and moist; pulse 90; no anodyne required at bedtime. For about three weeks, the patient took small doses of quinine and iron, but for some time has taken nothing but an aloetic purgative.

The most interesting facts in connection with these cases is the very acute character of the attack in the first case. The loss of 40 pounds in thirty days can only be accounted for by the conversion of a considerable portion of the tissues into products which were eliminated by the lungs and kidneys, as the skin was dry and the bowels constipated. During the time this acute attack continued, hardly any food was taken, but the thirst is described as intense, a goblet of water being swallowed every few minutes, the patient laying awake the greater part of the night to drink. The disease was just as acute in its recovery as in its commencement, the patient gaining rapidly in weight, although restricted to a diet containing but scanty elements for making fat. The improvement took place quite independently of drugs, and would, I believe, have been retarded by any specific medical treatment.

In the second case, the disease presented itself in quite a latent form, in fact, showing none of the more prominent characteristic symptoms; so that it would have been overlooked had not the means recommended for the cure of psoriasis and the generally dry state of the skin, led me to suspect that sugar might be found in the urine. The improvement in the skin disease as the sugar disappeared in the urine, would indicate the probability of the two diseases depending on some common cause, although further clinical observation will be required to settle this point.

As regards the causes of the disease or the pathological changes in the system, on which the formation of sugar depends, these cases, particularly the first, throw some light, at least as far as negativing some of the theories that have been advanced for explaining it. The acute character of the first case, where the patient lost 40 pounds in four weeks and the large amount of sugar passed, would indicate that the cause, whatever it may have been, must have existed in considerable intensity, and yet the very rapid and complete recovery would preclude the existence of any serious organic disease of the nervous system or of the pancreas, such as have lately been brought forward as causing the disease. The idea that the disease is caused by a want of oxygenerating power in the blood (whatever this may mean) is not more

tenable. Could the whole of the sugar, discharged in the urine of my first patient, have been oxygenated into carbonic acid and water, the heat produced would have been enough to have cooked him, or at least to have parboiled him in twenty-four hours. In the present undeveloped state of our physiology and the necessarily more backward position of our pathology, any dogmatic assertions as regards the cause of the disease must be premature.

As regards the therapeutics of the disease, they necessarily must be imperfect as long as its pathology is uncertain. I believe the better plan is to treat the general symptoms and trust to diet for arresting the formation of sugar. The various and opposite drug remedies that have been brought forward, more particularly by the chemico-pathologists, do, I believe, more harm than good. A diet of meat and green vegetables, milk, and particularly buttermilk, claret wine, whiskey in moderate quantities when the patient has been accustomed to it, acid fruit, warm salt water baths, and all the exercise that can be taken without over fatigue, are what we must principally trust to for curing the disease; aloetic purgatives with quinine and strychnine when required, and chlorodyne or chloral to produce sleep when necessary. Opium I think had better be avoided when sleep can be procured by other means, for although its action in diminishing the secretion of urine is well marked, yet the derangement of the digestive organs caused by its use, in my opinion more than counterbalances this advantage.

AUTOPSIES MADE BY J. LETTERMAN, M. D, CORONER OF SAN FRANCISCO.

Reported by Edwin Bentley, Assistant Surgeon U. S. Army.

Case 71st. "Medullary Cancer of the Liver."

G. S., German, laborer, aged sixty (60) years. This man was admitted at the City and County Hospital, at 6 o'clock, p. m., and died four hours after. His condition at the time of admission could not be distinctly made out.

Autopsy thirty-six (36) hours after death; no rigor mortis; slight emaciation; deep suggillations about the face and dependent parts; veins of the lower extremities enlarged; pupils dilated.

Head. Scalp thickened, œdematous and infiltrated with serum over the top of the skull; brain flaccid and pale, membranes anemic.

Thorax. Lungs softened and easily broken down, gray hepatization of the lower lobe of the right lung, pleuræ of both sides strongly adherent; heart collapsed, valves healthy; left ventricle empty, right contained a large white blood clot.

Abdomen. No thickening or inflammation of the peritoneum nor fluid within its cavity. The stomach and intestines showed no appearance of disease; the kidneys were also normal; the liver very much enlarged, and its surface studded with yellowish white elevations, from one-fourth to one inch in diameter. On making sections similar bodies were exposed from two and a half to three in breadth. The inner portion of those larger masses were softened and contained characteristic "cancer cells" in abundance; the gall bladder contained about two drachms of bile; the ductus choledochus was pervious.

Remarks. Diligent and faithful search failed in finding any malignant growth in any other organ of the body; the immediate cause of death may well have been suspected to have been the condition of the scalp, which assimilated as nearly as possible the usual appearances found in severe cases of erysipelas.

Case 72d. "Punctured Wound of the Abdomen."

M. R. A., American, bar-keeper, aged thirty (30) years. This man lived twenty-four (24) hours after receiving the wound, which was probably inflicted with a knife.

Autopsy eighteen (18) hours after death; large well developed man; rigor mortis well formed; pupils normal, frothing at the mouth and nose; external wound on the left side of the abdomen, two inches above the superior spinous process of the ilium; green circle around the umbilicus and down the right side toward the inguinal region.

Head. Scalp, pericranium, membranes and veins of the brain engorged with blood; brain of firm and normal consistency.

Thorax. Right lung strongly adherent, left lung collapsed, no tubercles; heart collapsed; no blood clots in the ventricles; valves normal.

Abdomen. Ninety-six (96) ounces of blood found in the cavity of the peritoneum; ilium perforated for three-eighths of an inch about one foot from the ileo-cæcal valves, and a portion of its fluid and gaseous contents had run out. The right iliac vein also contained a small perforation; the peritoneum intensely inflamed and patches of lymph had been poured out on the surface of the mesentery. Wound nearly twice the size at the internal as at the external orifice of the abdominal wall, and the direction of the wound upwards and inwards; the organs of the abdomen were healthy.

Remarks. The blood in the abdominal cavity was in a fluid condition, and no appearance of coagulæ were found in the course of the examination. Death from syncope induced by internal hemorrhage.

Case 73d. "Chronic Alcoholism."

C. B., German, barkeeper, aged thirty-eight (38) years. The habits of this man appear to have been those of a constant tippler; he was found dead in the street about 4 o'clock.

Autopsy six (6) hours after death; rigor mortis partially formed; pupils dilated; no emaciation; superficial cut an inch long over the bridge of the nose; large, old indolent ulcers on the anterior surface of both legs.

Head. Scalp injected and free hemorrhage from the usual transverse incision over the top of the skull; membranes of the brain hyperæmic, serum under the visceral layer of the arachnoid; brain firm, superficial veins distended with blood; two ounces of bloody fluid in the dependent membranes attached to the base of the cranium.

Thorax. Pleural surfaces strongly adherent; lungs healthy; pericardium contained two drachms of serum; heart apparently healthy, cavities full of fluid dark blood.

Abdomen. Gastric veins distended and the mucous surface of the stomach intensely inflamed, especially about the cardiac orifice, and of a deep crimson color. The intestines were healthy; the liver was enlarged, of a light yellow color and the section presented a well-marked amyloid appearance, and quite free from hemorrhage; gall-bladder contained a few drachms of thin, dark bile; ducts pervious; kidneys large and white; spleen very red and soft, of usual size.

Remarks. The congested condition of the brain with the extreme engorgement of the vessels, the œdema and great infiltration of serum into the meshes of the arachnoid, and extending to the ventricles, in the absence of other diseases of the brain would fairly lead to the suspicion of the immediate cause of death being serous apoplexy, induced by a paroxysm of extreme inebriation.

Case 74th. "Pneumonia."

A. O. B., white, female, Irish, nurse, aged thirty-eight (38) years. This woman was found dead after neglect and exposure, and without having had previous medical attendance.

Autopsy thirty-six (36) hours after death; body well nourished; rigor mortis strongly marked; pupils normal; no external signs of violence.

Head. No hemorrhage from the usual division of the scalp; membranes injected; brain hyperæmic and of normal consistency.

Thorax. Right lung inflated, crepitant, and free from pleuritic adhesions; surface of the left lung covered with lymph, patches of which are also attached to the costal pleuræ; the whole lung consolidated, the sections of a pale yellowish gray color, softening and beginning to undergo the process of fatty degeneration, the natural termination of gray hepatization; heart normal, the left side empty, the right ventricle and auricle distended with ante-mortem blood clots.

Abdomen. Three inches of adipose on the anterior surface in the medial line of the abdomen; liver large and fatty; spleen soft, kidneys normal; stomach, intestines, pancreas, and the female organs revealed no evidence of diseased action.

Remarks. Death in this case appears to have been induced by the sudden and rapid development of an attack of acute pleuritis upon a chronic pneumonia, which already involved the functions of an entire lung.

Case 75th. "Consumption—Death at Sea."

H. M. C., American, aged (40) years. This man died while a passenger on board of a steamer in transit from the northern coast to this city; he was reported to have shown symptoms of insanity on the passage.

Autopsy thirty-six (36) hours after death; body extremely emaciated; no rigor mortis; no œdema of the limbs; integuments of a soft, smooth, velvety feeling, very pale and anemic; eye-balls collapsed.

Head. Not opened.

Thorax. Lungs adherent and full of yellow tubercles; a large vomica in the upper lobe of each lung, with numberless small cavities in the lower lobes, and on the right side in the middle lobe; heart flaccid, cavities empty; large macula albinæ over the anterior surface of the right ventricle.

Abdomen. Intestines contracted, especially the colon through its entire course and divisions; no ulceration or cicatrices within the calibre, which was narrowed to one-fourth of an inch; stomach empty, mucous coat pale, no abrasions, softening or apparent attempt at digestion of any part of the organ; pancreas very white and firm; spleen small, normal; liver small and of a yellowish amber color in the sections; kidneys healthy; no enlargement of the lymphatic glands or inflammation or thickening of the peritoneum.

Case 76th. "Found Dead in his room."

W. W. D., Irish, upholsterer, aged fifty (50) years; body when found was in an advanced state of decomposition and much swollen; ramifications of the superficial veins distinctly seen; large bullæ over the surface; abdomen green; face black; body and limbs tympanitic; gas escaping from incisions made in the cellular tissue; scrotum two-thirds the size of the head; tunica vaginalis distended with a reddish liquid.

Autopsy about one week after the man was last seen; the features scarcely recognizable.

Head. No hemorrhage from the dissection of the scalp; brain firm and of a grayish color; no apparent lesion of any structures with the cranium.

Thorax. Lungs healthy, no adhesion; heart enlarged, ante-mortem clot in the right ventricle; no valvular lesions; no atheroma of the large arteries.

Abdomen. Viscera of the abdomen in a normal condition, having undergone less change than would be inferred by the external appearance of the parts.

Remarks. Such examinations are very unsatisfactory so far as relates to definite results. Yet in a negative sense they are quite conclusive, for if any great lesion of the organs had existed, they would have been revealed.

Case 77th. "Drowning."

Unknown woman, Irish, aged about forty (40) years, found floating in the bay, and at the time reported to have been warm to the sense of those who examined her.

Autopsy about thirty-six (36) hours after she was found; a very large, fat, muscular women; no external marks of violence; strong rigor mortis present; pupils normal; sand adherent to the hair and hands, and limbs.

Head. Scalp congested and bleeding freely from incisions made to raise it; vessels of the membranes dilated; substance of the brain firm and hyperæmic.

Thorax. No pleuritic adhesions, lungs floating; six ounces of water in each pleural sac; heart normal, fluid blood in all the cavities.

Abdomen. Peritoneum healthy; liver congested, blood ran profusely from incisions in it; gall-bladder distended with bile, gall-ducts unobstructed; mucous membrane of the stomach intensely inflamed; spleen firm, kidneys healthy, pancreas of a pinkish red; ante-version of the uterus; a cyst the size of an orange in the left ovary.

Remarks. It appears that this woman, who had been addicted to habits of inebriation, in a fit of delirium, threw herself into the water and sank before she could be extricated.

Case 78th. "Suicide—By Pistol Wound of the Head."

J. S., mulatto, American, cook, aged twenty-six (26) years. This man killed himself after shooting a Mexican woman four times, at her lodgings, for refusing to marry him.

Autopsy sixteen (16) hours after death; discharge from nose and mouth of blood and mucous; rigor mortis very strong; wound through the supercilliary ridge, just above the upper and inner angle of the left orbit; pupils dilated; an old cicatrix over the inner side of the right thigh, two inches square; a naked woman with the foot resting on a stool, marked in India ink on the right arm; two hearts and a wreath marked on the right thigh; deep suggillations about the face and dependent parts.

Head. Scalp congested, incisions made in the dissection bleeding freely; the orbital plate of the frontal bone, and the anterior clinoid process of the sphenoid bone fractured; ball found in the posterior cornu of the lateral ventricle of the left side; extravisation of blood in the left hemisphere, with large dark blood clots within the dura mater on the surface of the cerebrum.

Thorax. Lungs large, healthy; heart normal, cavities empty; *macula albino* over the right ventricle.

Abdomen. Mucous membrane of the stomach intensely inflamed; liver congested and thickened on the margins; spleen soft; kidneys hyperæmic; pancreas and intestines normal.

Remarks. This man was no doubt under the influence of the delirium incident to a protracted debauch.

Case 79th. "Poisoning by Morphine Sulphate."

M. C., white, female, Irish, aged thirty-two (32) years; found dead in her bed; has been addicted to the habitual use of narcotics; has traveled in China; of late has been indisposed and treated for rheumatism and chronic diarrhœa; reported to have indulged freely in the use of alcoholic stimulants.

Autopsy sixteen (16) hours after death, frothing from mouth and nose; slight rigor mortis present; pupils a little dilated; symmetrical figure; no external marks of violence, no wasting or emaciation.

Head. Free hemorrhage from the usual transverse incision of the scalp; small filamentous clot in the superior longitudinal sinus; vessels of the membranes injected; brain firm, hyperæmic; two ounces of effusion at the base of the skull, collected in the dependent membranes.

Thorax. Lungs and heart healthy.

Abdomen. Contraction of the right lobe of the liver, by a transverse cicatrix four (4) inches in length; spleen very firm and the sections of a lead color; kidneys granular; pancreas normal; mucous membrane of the stomach of a dark red and soft; small intestines healthy, large intestines contracted, especially the descending colon, which is distinctly marked by old cicatrices, with large patches denuded of mucous membrane; uterus healthy; cysts the size of a filbert attached to each ovary.

Remarks. The habits and circumstances connected with the death of this unfortunate woman left little doubt with her attending physician, that she died from an overdose of morphine sulphate.

Case 80th. "Chronic Pneumonia."

A. C., French, farmer, aged seventy (70) years. This man died suddenly while attending to duties about his ranch. He had not previously complained

of indisposition, but had expressed himself as feeling generally very well.

Autopsy forty-eight (48) hours after death; no rigor mortis present; pupils dilated; body emaciated; scalp of a scarlet color and adematous; no external marks of violence or injury.

Head. Bleeding from the incisions made in the usual dissection of the scalp; pericranium very red; skull soft; drops of dark blood over the external surface of the dura-mater; pacchionian bodies prominent; brain firm and white in the sections; superficial veins engorged with blood; serum in the ventricles and at the base of the brain; dependent membranes flowing over with fluid.

Thorax. Lungs strongly adherent posteriorly, consolidation of the lower and middle lobe of the right lung; sections of a yellowish gray color, softened, and evidently undergoing the fatty degeneration common to the gray hepatization of Lænnec; heart atrophied, valves intact, no clots in either side; no atheroma of the large arteries.

Abdomen. Stomach, intestines, pancreas, kidneys and spleen presented no changes beyond those common to old age; liver atrophied, of normal consistence and color, sections bleed readily; gall-bladder partially full of bile.

Remarks. The disease in this case would appear to be sufficient to account for death, even in youth or manhood. It is also an example of the power of the will to resist physical suffering in old age strongly manifested.

ICTERUS NEONATORUM IN THREE MALE CHILDREN BORN IN SUCCESSION OF THE SAME PARENTAGE.

By S. M. Mouser, M. D.

Mrs. C., a young Scotch woman living in San Francisco, was delivered about eight years ago, after a severe and protracted labor, at term, of a dead male child. Six years ago she was delivered after another protracted labor of a healthy female child, which is still living and in good health. Two years after I attended her again through a severe labor, when she was delivered of a healthy looking male child, which nursed and performed all the functions of a healthy new-born babe. It seemed perfectly well until the second day, when it became jaundiced, declined the breast, moaned, appeared to shrink, and died on the third day. Two years since I was engaged again to attend her, but for some reason, was not called and no physician was present at the delivery, but the woman gave birth to another apparently healthy male child. When it was six days old I was called in haste to attend it, the messenger saying that it was bleeding to death. I found it shrunken, jaundiced and bleeding from the navel, the cord having become detached that morning. Employed styptics, compression and caustics without the slightest benefit, the bleeding continued at intervals until the ninth day when it died.

On the 11th of the present month I attended her again through another hard labor. She again gave birth to a remarkably healthy looking male child. It was strong and seemed to all appearances likely to do well, notwithstanding the fears of the parents and not a little apprehension on my part, on account of the result in the two previous cases.

On the 12th, when I entered the room, the mother was agitated and said her baby was going to die, as its skin had become yellow, which, on examination, I found to be the fact. It still nursed and seemed strong and well, but in the afternoon of the same day, it ceased to nurse, became drowsy, and took on the shriveled look which characterized the disease in the other children. The bowels had not been moved very freely, the urine stained its clothes a bright yellow, and a blood spot was shown me by the nurse, who believed it came from the urethra. Ordered a small powder of Hyd. Cum. Creta.

July 13th, the father called on me this morning, saying he had been persuaded to call in a Homœopath, and had concluded to do so, and that my services would be no longer required.

Child died on the 22d, after having been informed from day to day that, under the highly scientific treatment it was being submitted to, it was rapidly recovering. I could not learn whether there was any hemorrhage from the umbilicus. In the case of the second child, the mother said she knew that the woman who attended her dragged heavily upon the cord, and attributed the hemorrhage to that circumstance. In the case of the last child, I am certain that the cord was not put upon the stretch to any considerable degree. I have no doubt that phlebitis (perhaps of the portal vein) was the cause of death in all three of these children; but why it should have occurred is a question I am not at all prepared to decide. The parents both seem to enjoy perfect health.

BIBLIOGRAPHICAL NOTICES.

Renal Diseases: A Clinical Guide to their Diagnosis and Treatment. By W. R. Basham, M. D., etc. Published by Henry C. Lea, Philadelphia. A. Roman & Co.

There have been many manuals on diseases of the kidneys presented to the public, since George Johnson made available to the profession the important observations of Dr. Bright, but there are few of them that can be spared from the physician's library. The little work before us, though a 16mo of

three hundred pages, is little less important than those that have preceded it.

The frequency with which valvular diseases of the heart are accompanied with albuminuria, must have attracted the attention of every physician who takes the trouble to examine the urine of such patients. Nowhere has this relation or complication been so well explained as in the following quotation from Dr. Basham:

In the early period of these disorders (Valvular Disease of the Heart, Emphysema and Chronic Bronchitis) it is only when the obstruction in the circulation has reached a certain limit, when dropsical effusion begins to show itself in the lower extremities and the retardation in the venous current is felt in the inferior cava, that the circulation through the kidneys begins to be embarrassed in consequence of the return of blood from the kidneys through the emulgent vessels not being freely delivered through the vena cava. The first effect of this embarrassment in the renal circulation is the presence of albumen in small quantities in the urine, unaccompanied, however, by any special microscopic object in the sediment. The albumen seems derived at first from a simple blood stasis. The venous plexus surrounding the uriniferous tubules, suffers a condition similar to compression of the veins of a limb, with similar consequences. The vessels swell and the surrounding textures become infiltrated with the serous or watery element of the blood. This permeates the uriniferous tubes and adds an albuminous element to the otherwise natural urine.

That this is so seems proved by the total disappearance of the albumen from the urine in the early stage of these disorders, when treatment has successfully for a time combated the primary disorder and relieved the embarrassed circulation. It is not till late, and after a prolonged duration of these diseases, that the organic or structural changes in the kidneys, about to be described, begin to take effect, and the albumen to be accompanied by microscopic evidence of chronic disease of the kidneys. The effect of mechanically induced congestion to produce induration and change of structure in such organs as the liver and kidneys, is a well recognized pathological law. The impediment to the circulation causes an exudation of material from the blood, which, whether it be lymph, such as transudes in ordinary inflammatory stasis, or not, eventually leads to condensation and induration of structure, and microscopically is seen either as a fine granular matter or having the more organized character of fibrous or fibroid tissue. Thus in disease of the heart and lungs, valvular disease of the former, and such disorders as emphysenia and chronic bronchitis of the latter, the impediment to the circulation reaches or is felt in the right side of the heart, and the organs whose blood is more immediately or more directly emptied into the cava are those which suffer most prominently. Among them the kidneys occupy the chief place, partly because their nutrition suffers from the stasis in the inter-tubular plexus, and partly because, in those diseases in which the transmission of blood through the lungs is impeded, there must necessarily follow an accumulation in the blood of effete or suboxidized material in consequence of the imperfect respiratory function. The two forms of diseased kidney arising from these causes are the contracted yellow granular kidney, and the large granular kidney.

The young practitioner must not forget that these disorders of the circulation, whether arising in the lungs, heart or liver, and the consequences as seen on remoter organs, especially the kidneys, are evidence of a wide spread decay pervading the organism rather than of disease of any separate or single organ. The implication of the kidneys, as indicated by the albuminous urine, and granular and hyaline and other casts seen in the sediment, must be regarded as the last link probably in the chain of decay, for degeneration is everywhere evident. The chief textures of the body yield to microscopic research proof of departure from the physiological type of structure, and the conviction remains that the renal degeneration, although promoted by the obstructive conditions in the circulation, is nevertheless but a presage that the limit of life is approaching, and that these degenerations are but the expression of a special form of decay to which all organized beings are finally subject, modified as the form may be by temperament, constitutional proclivities, by habits of life or concurrent disease.

"*The Men who Advertise.*" "*American Newspaper Rate Book*" *and* "*American Newspaper Directory for* 1870. 750 pages: large octavo. Price, $5.00. New York: G. P. Rowell & Co., Advertising Agents.

This is one of the most complete newspaper directories that has ever been published in the United States, and is of great value to editors, publishers, and those whose business requires advertising.

THE PHYSICIAN'S EQUIPAGE.

In Queen Anne's reign, no physician with the slightest pretensions to practice, could manage without his chariot and four, sometimes even six horses.

The most of our San Francisco physicians (the respectable ones) manage to get about with two horses if they are of pretty good size; their modesty prevents their using more at one time. The King of Pain did drive four, but what has become of him?

There are 1594 registered physicians, in good standing, in New York City.

REPORTS OF SOCIETIES.

CALIFORNIA PHARMACEUTICAL SOCIETY.

Secretary's report of the fifteenth meeting held on the evening of July 11th, 1870. The meeting was called to order at 8 P. M., by the President. The minutes of the previous meeting were read and approved, after which, several gentlemen were elected members, according to the Constitution of the Society.

The report of the Executive Committee being next in order, the Chairman presented a statement of the labors of the Committee since the last meeting. A large mahogany cabinet had been purchased and placed in the rooms of the Society. Various offers of donations of mineral specimens, books, &c., had been received and acknowledged. The attention of the meeting was directed to a set of Hodgeson's Patent-Moulded Graduated Measures, presented by Messrs. Campion & Co., of Philadelphia. The circular relating to the course of lectures in Materia Medica and Chemistry, printed and distributed by direction of the Committee, was read. The meeting endorsed the action of the Committee in the matter of the lectures to be given by the Faculty of the University of the Pacific, and remarks were made by various members upon the subject. The meeting coincided with the views of the Committee, that the lectures received an added value, viewed in the light of an introduction to the establishment of a college of Pharmacy in San Francisco.

The Secretary read the letter from the Maryland College of Pharmacy, requesting delegates to a convention to be held in Baltimore, in September next, for the purpose of determining upon the best uniform course of study for those learning the profession of Pharmacy. After some discussion, it was resolved to elect delegates at the next meeting, to this convention, and also to the annual meeting of the American Pharmaceutical Association, also to be held in Baltimore in the month of September.

The President addressed the meeting upon the appointment of W. T. Wenzell, a member of the Society, as one of the Committee on the revision of the United States Pharmacopœia, who are to meet in Philadelphia upon the 25th of July. Mr. Wenzell made remarks upon his nomination as one of the Committee of Revision, and after stating his intention of leaving for the East, during the following week, requested the opinion of the meeting upon various changes suggested to be made in the U. S. Pharmacopœia. A prolonged and interesting debate ensued upon the nature and relations of fluid extracts, tinctures and inspissated juices of plants, also upon the redundancy of liquid preparations to be observed in retail drug stores, as well as the advantages of the French or Metric system of weights and measures.

The unanimous opinion of the meeting was expressed as favorable to reducing the strength of fluid extracts to one-half their present standard, and to the gradual adoption of the Metric System.

The following resolutions offered by the Chairman of the Executive Committee, were adopted by the meeting.

Resolved, That the California Pharmaceutical Society observe with pride and pleasure the appointment of Mr. W. T. Wenzell, one of our members, as one of the Committee on the revision of the United States Pharmacopœia.

Resolved, That the California Pharmaceutical Society consider Mr. Wenzell as a suitable representative of the Pharmaceutists of the Pacific Coast, and believe that our interests in the revision of the Pharmacopœia, will be ably sustained by him.

The institution of a college of Pharmacy, was by common consent, deferred until after the annual meeting of the Society, to be held in October.

The meeting adjourned at 10½ P. M., to meet the second Monday in August.

JAMES G. STEELE.
Secretary.

MEDICAL COLLEGE CONVENTION.

[Continued from our last.]

SATURDAY.—SECOND SESSION.

Meeting called to order by the President, at 10 o'clock, A. M. The Secretary read the minutes of the previous meeting, and they were approved. A recess of ten minutes was taken, to allow the Committee on Credentials to register new members.

When the Convention was again called to order, Prof. S. M. Bemis, Chairman of Committee on Credentials, reported the following additional members:

Kansas Medical College: Profs. John M. Forrest and A. P. Lankford.

Missouri Medical College: Prof. A. Hammer.

Medical Department University, Nashville: Profs. W. K. Bowling and W. G. Briggs.

National Medical College, D. C.: Profs. W. P. Johnston and N. S. Lincoln.

Medical Department University, Maryland: Prof. F. Don aldson.

Prof. N. S. Davis offered the following resolutions, for the purpose of facilitating the transaction of business, and they were unanimously adopted:

Resolved, That all motions and resolutions, except to adjourn, lay on the table, or postpone, must be in writing, with the name of the author attached.

Resolved, That the name of every member who may be recognized as occupying the floor, must be distinctly announced by the President, before he is allowed to proceed.

Resolved, That no member shall be permitted to speak more than once on the same subject, until all others have spoken who desire to do so.

The Secretary announced the reception of a dispatch, saying that John A. Murphy, of Miami Medical College, and Theophilus Parvin, of the University of Louisville, were detained at Grafton, Va., by failure of railroad trains to make connection.

Prof. N. S. Davis offered the following resolution, which was adopted:

Resolved, That the several propositions adopted by the Convention at Cincinnati, in 1867, be taken up separately, in the order in which they stand in the printed report.

The first proposition, which related to the standard of preliminary education, was read by the Secretary. After some discussion, concerning the question whether the action which might be taken was to be considered binding on the institutions represented, it was distinctly claimed by the delegates from Philadelphia and several other places, that they had no authority to pledge their respective schools until their action should have been submitted to their respective faculties. Prof. J. S. Moore offered the following amendment:

Strike out of the proposition all between the word "education" and the words "and the certificate," and inserting "with a sufficient knowledge of the construction of the language to enable him to understand medical technicalities."

After remarks by Prof. J. S. Moore and Prof. D. W. Yandell, in favor of the motion, Prof. A. Hammer offered the following amendment to the amendment of Prof. Moore:

"To strike out of the original proposition all that related to Greek and Latin, and retain the rest." He protested against the views expressed by Professors Moore and Yandell, and advocated a fair standard of education, but was willing to omit the ancient languages, if it would be the means of making the rest of the standard more likely to be adopted and carried into practical effect.

Professors Reyburn, Loomis and Cox, of Washington, advocated the retention of the original proposition, without amendment.

Prof. D. W. Yandell replied, in substance, that all resolutions and recommendations on the subject would be of no avail. The community would employ whom they pleased as doctors, whether they had any education or not; and medical students would go to any College they pleased, if they had money enough to pay the fees, entirely regardless of any standard of preliminary requirements.

Prof. N. S. Davis discussed the subject fully, claiming that the positions occupied by Prof. Yandell, and others on the same side, were wholly untenable. The reason why so large a number of medical students presented themselves to the Colleges, totally without any adequate general education, was simply because the schools required none. Suppose all the Literary Colleges and Universities in the country should open their doors to any who might come, without any examination or standard of previous acquirements, how long before they would be filled with students who had not acquired the first elements of education? If the Medical Colleges made a standard, and provide for its practical maintenance, instead of cutting off the supply of students, it would simply cause such young men as desired to study medicine, to first make the necessary preliminary preparation. And not only this, but the example of the Colleges would be followed by all our social orgnizations, whether local, State, or National, forbidding any of their members from receiving a student into their offices, without the required amount of mental training.

He thought the subject one of paramount importance; in fact, the very foundation on which all other improvements must rest. He would not be tenacious about Greek and Latin. But the responsibility for the present state of things was directly with the schools. It was narrowed to the simple question. whether the College Faculties will unite on what all agree to be desirable and right, and carry it into practical execution, or whether they will let their mutual jealousies and distrust of each other, keep the education of the whole profession in its present condition?

Prof. A. Stille claimed that the action of the American Medical Association, and that of the previous Convention of College Delegates, had had a good effect. They had advanced and moulded public sentiment in the profession, and much progress had actually been made by the schools. He thought further advances must be made in the same way. He therefore moved the following, as a substitute for both the amendments now before the Convention:—

Resolved, That, in the judgment of this Convention, the propositions adopted in 1867, by the Convention of Delegates from Medical Colleges, embody a system of collegiate medical education in the highest degree commendable, and which, if they could be generally carried into effect, would tend to elevate the medical profession,—that, nevertheless, the requirements for the degree of Doctor of Medicine must be practically determined by each Medical College for itself, by the average attainments of its students, and by other considerations, of which it alone can judge; and that, consequently, while abstaining from all attempts at dictation, this Convention reiterates, in the strongest manner, its desire that the several Medical Colleges will, in the changes from time to time made by them in the curriculum of study, endeavor to conform them to the general plan which was recommended by the Convention of 1867, and adopted in the same year by the American Medical Association.

Prof. Samuel Logan thought the substitute out of order, inasmuch as it carried with it all the subsequent propositions, as well as the one directly under discussion.

The President decided the substitute to be in order.

Its adoption was opposed by Professors Hammer, Logan, J. B. Johnson, and Bemiss, who claimed that they had come to the Convention with such instructions from their respective schools; that they were prepared to act on all the propositions, and with binding effect.

Prof. S. D. Gross, having called the Vice-President to the chair, took the floor, and stated that the whole question was in a nut-shell, and a very small shell at that. It was simply, "Will the American Medical Colleges combine, and go forward to a proper standard of education?" Will the Colleges continue to stultify themselves with resolutions, or will they act? He thought the schools alone responsible, and claimed that they could accomplish the work in an hour, if they would. He said it could be done by no other power—the American Medical Association being powerless in the matter.

In taking the vote on the substitute offered by Prof. Stille, a division of the house was called for, and resulted in *five* affirmative votes, and *fifteen* in the negative. The substitute was rejected.

The question recurring on the amendment to the amendment, as offered by Prof. Hammer, it was opposed by Prof. Gross, and, with the consent of the Convention, it was with drawn.

The question recurring on the amendment offered by Prof. Moore, Prof. Forrest again raised the question, whether the action the Convention may take is to be regarded as final and obligatory upon the Colleges represented or only advisory?

A conversational discussion ensued, which developed the fact that a majority of the representatives from Colleges in the West and Southwest had come with definite instructions in favor of advancement and final action; while the representatives from both the schools in Philadelphia, and several others, disclaimed having any instructions, and that whatever might be done would have to be submitted to the Faculties of the schools for ratification.

In answer to an inquiry about the terms of the call for this Convention, Prof. Davis explained that the results of the previous Convention, consisting of the propositions now before this body, were laid before the Faculties of all the Colleges, known to exist in the country, more than two years since, and it was certainly hoped and expected, that, in sending delegates to this Convention, they would so instruct them as to permit final action; but if such had not been the case, we had now no alternative but to regard whatever action we take as advisory.

Prof. Gross moved a reconsideration of the vote on the substitute offered by Prof. Stille, which was seconded. The

reconsideration was opposed by Professors Logan and Moore.

Prof. Davis wished it to be understood that most of the Colleges in the West and South were ready to act, and declared that if the old institutions in Boston, New York and Philadelphia, would lay aside their pretty rivalries, and act on what they all acknowledged to be right, every College in the Mississippi Valley and beyond it, would cordially go with them. He wished the responsibility to rest where it justly belonged. If, however, we could only advise, he was in favor of holding what we had got at present, and trust to time and Providence for the future. It would be found that there was more than one road to the object sought.

The vote on the reconsideration was carried in the affirmative.

Prof. Gross moved the adoption of Prof. Stille's substitute, which was carried by a large majority.

Prof. Samuel Logan then offered the following resolutions:

Whereas, This Convention has failed to secure the assent of a majority of the regular Medical Colleges of the United States to the improvement in medical education recommended at its last session; and,

Whereas, It is the opinion of this Convention that the best means by which a judicious system of gradual improvement in medical education can be inaugurated by the Medical Colleges of this country, will be found in the *associated action* of such Colleges as will unite for that purpose; it is hereby

Resolved, 1*st*. That a committee of nine be appointed, whose duty it shall be to communicate with the Faculties of all the regular Medical Colleges in the United States, with the view to ascertain how many, and which may be willing to become members of an *Association of Medical Colleges*, having for its prime object the improvement of medical education.

2d. That the Chairman of said Committee be instructed, as soon as he shall have received affirmative replies from ten (?) regular Colleges, to inform each Faculty so consenting, of the fact, and to request that each Faculty elect one or more delegates, to convene on the Friday before the day appointed for the meeting of the American Medical Association in 1871, and at the place of meeting chosen by that body—said delegates to be fully authorized to pledge their repective Faculties to whatever definite plan of improvement in medical education may be adopted by the body in Convention.

3d. That it is hereby recommended that said delegates organize themselves, in behalf of their respective institutions, into a permanent *Association of Medical Colleges* for the above-mentioned object, and with the view of co-operating with the American Medical Association and the profession, at large, in efforts to accomplish so desirable an end.

4th. That Professor N. S. Davis, the Chairman of the Committee appointed by the Convention of 1867 to communicate with the Medical Colleges on the same subject, be made the Chairman of this Committee, and that the Committee be authorized to fill any vacancies which may occur in its ranks.

After the reading of the resolutions, Professor Lankford moved that the Convention adjourn to 8 o'clock P. M,, for their further consideration, which motion was seconded and carried.

EVENING SESSION.

The Convention was called to order at 8 P. M.—Professor Yandell, Vice-President, in the Chair.

The following additional delegates presented their credentials, and took their seats:—

University of Louisville, Prof. Theopholis Parvin; Miami Medical College, Prof. J. A. Murphy; Medical College of Alabama, (Mobile), Prof. Edward P. Gaines; University of Buffalo, Chas. A. Lee.

The Secretary read the resolutions offered by Professor Logan, previous to adjournment.

On motion of Professor Bemiss, they were unanimously adopted.

The Vice-President in the Chair, filled the Committee called for in the first resolution, as follows:—

Prof. N. S. Davis, of Chicago, Chairman; Prof. Samuel Logan, of New Orleans; Prof. A. Hammer, of St. Louis; Prof. T. Parvin, of Louisville; Prof. S. D. Gross, of Philadelphia; Prof. A. C. Post, of New York; Prof. Geo. C. Shattuck, of Boston; Prof. Geo. C. Blackmon, of Cincinnati; Prof. A. P. Talley, of Charleston.

On motion of Professor Logan, it was resolved that a complete copy of the proceedings of this Convention be transmitted by the Secretary to the Secretary of the American Medical Association, another copy to the Committee of Nine, just appointed; and another to the medical periodicals of the country.

Professor A. Hammer offered the following resolution, seconded by Professor Moore:—

Resolved, That the attempt, on the part of any existing schools, to reduce their tuition fees, or of any new College to be started, to underbid its neighbors, shall be by this body considered and pronounced to be an act of dishonesty.

After some discussion, participated in by Professors Hammer, Murphy, and Davis, the mover, with the consent of the house, withdrew the resolution.

On motion of Professor Hammer, the thanks of the Convention were tendered to the officers, for the able manner in which they had discharged their duties; and to the Faculty of Georgetown Medical College, for the use of their building.

On motion of Professor Bemiss, the Convention adjourned *sine die*.

N. S. Davis,
Secretary of Convention.

TRANSFORMATION OF THE HYDRATE OF CHLORAL INTO CHLOROFORM IN THE HUMAN ORGANISM.

M. Personne's communication on Chloral, has just been brought before the Academy of Sciences. The results of his experiments point to the transformation of chloral into chloroform within the human organism. His experiments were conducted in two ways. First, chloral was directly mixed with the blood of an ox; next the substance was given in toxic doses to a dog, which was slain when in a condition of complete anæsthesia. The blood of both animals was examined, and not the slightest trace of chloroform was to be detected by the smell. But when M. Personne, thinking that the smell of chloroform was necessarily covered by that of the blood, resorted to other means of investigation, he arrived at a quite different results. A chemical analysis of the fluid was made, and then it was discovered, by employing the usual means for the detection of chloroform, that a large quantity of chloride of silver could be obtained from the blood which had been directly mixed up with the chloral, and a less quantity from the blood of the dog which had absorbed the substance. As the objection might be made that the chloride of silver does not result from the transformation of chloral and the consequent introduction of chloroform into the blood, M. Personne at once tells us that he could obtain the chloride of silver only when a small quantity of carbonate of sodium was added to the hydrate of chloral. Thus, he says, the alkali in this experiment has alone transformed chloral into chloroform, as does the alkali of the blood. The same results were obtained on examining the residue found in the stomach of the dog, and M. Personne states that absorption through this channel is extremely slow. Examination of the urine furnished no traces of chloroform—a fact which is in contradiction to what Dr. Bouchet has recently observed.

M. Personne has come to the conclusion "that hydrate of chloral does not pass through the human organism without undergoing a transformation, but that on reaching the blood it is separated into formic acid and chloroform, which latter substance is subsequently converted into chloride of sodium and formiate of soda, the products of its elimination."—*Lancet.*

California Medical Gazette.

SAN FRANCISCO, AUGUST, 1870.

☞ *All Letters and Communications to be addressed to the "Editors California Medical Gazette, care of A. Roman & Co., San Francisco."*

THE TOLAND MEDICAL COLLEGE AND THE UNIVERSITY OF CALIFORNIA.

The Executive Committee of the Board of Regents of the University of California, at a meeting held on the 19th of July, recommended the adoption of the following resolutions as the terms on which the Toland Medical College shall become affiliated with the University:

"*Resolved*, That the Regents of the University will accept from the Toland Medical College, a conveyance of the real estate and personal property tendered by the Faculty of said College, subject only to such conditions as may be imposed by the Act organizing the University.

Resolved, That said College shall hereafter be known and designated as "The Medical Department of the University of California."

Resolved, That the several Professors in said Medical Department shall be elected by, and shall hold their office during the pleasure of the Regents of the University; but the Regents will confirm any Professor nominated by the Faculty of Medicine, unless cause, good and sufficient, in their estimation, appear for rejection.

Resolved, That the Faculty of Medicine shall have the right to determine the qualifications for the admission of students, to charge such fees as they see proper, to make such regulations not inconsistent with the organic Act for the preservation of order and for the management of the internal affairs of the Medical Department as they may deem best, to determine the course of study, and to examine candidates for a medical diploma.

The Regents will confer degrees upon such students of medicine as may be recommended therefor by the Faculty of the Medical Department, and upon none other.

Resolved, That the Faculty of the Medical Department shall have no power to contract any debt or obligation binding upon the Regents of the University."

All of which is respectfully submitted.

Horatio Stebbins,
W. C. Ralston.

These terms are such as would give, ultimately, to San Francisco, a medical school that would meet the future wants of this coast. Whatever defects there may be in the organization of that school would be eradicated by time and the conservative power of the Board of Regents. In consideration for the powerful influence of the State University in favor of the school, the fine property donated by Dr. Toland becomes the property of the University, and the medical school becomes a part of its educational system. It would cease to be a private school, and would become one in which the entire medical profession would have an interest, and in the language of the committee, become of benefit to the community at large.

Dr. Stebbins next read a communication from a number of medical gentlemen connected with the "Medical Department of the University of the Pacific" as follows:

To the President and Board of Regents of the University of California—The Faculty of the Medical Department of the University of the Pacific beg leave to submit to your consideration the following statements and suggestions in regard to medical degrees and medical education in the State of California:

The facility with which degrees are obtained in many American medical colleges has lowered the standard of education in medicine and much impaired the value of a diploma as a criterion of professional qualification. For a number of years the earnest educators of our country have labored to correct the evil so that a diploma shall be what it proposes. But in the old States, where the schools have been long established, it is almost impossible to effect any radical change in this respect; nor is it at all probable that much improvement will take place so long as each school has the power of conferring degrees on its pupils. We believe an opportunity is now offered, through the University of California, to make a thorough reform on this coast, by providing that all medical degrees shall issue from one common source, under the authority of the University.

We, therefore, propose that the University shall take such a position as will enable it to control this entire question. It may not be practicable to carry out the movement at once. But such steps may be taken as shall finally lead to the establishment of an Examining Board, independent of all medical schools, through which all candidates for graduation, from whatever school, shall receive the diploma of the Medical Department of the University of California.

This is the system in operation in the University of London, which is not connected with any educational institution, but which stands as an independent and impartial body, examining candidates from the several medical schools of London and elsewhere, and granting diplomas which are universally acknowledged to be an evidence of thorough professional attainments. So satisfactory has been the working of this system that an organized effort is now on foot to place all the medical schools of Great Britain under one common head in this respect, and thus to establish a uniform basis of medical education for the whole kingdom. If this could be done for America, it would be a rich blessing, both to the profession and the community. It is in the power of the University of California to take the initiative in the movement, and not only to confer a signal benefit at home, but to set an example which cannot fail to extend its happy influence to other States of the Union.

They may arise some difficulties in carrying out the proposed plan. But the same may be said of all progressive and reformatory movements. If the Board of Regents should see no way for present action, they can, at least, refrain from any step which will tie their hands and restrain their freedom in the future.

We take the liberty of suggesting to the Board of Regents, that the adoption by them of the Toland College as the exclusive Medical Department of the University, would not only debar them from hereafter taking an independent position on this question, but would be an act of manifest unfairness and injustice toward the Medical Department of the University of the Pacific. This is the oldest medical school in California, organized in 1858, under a charter from the first University ever established on the Pacific coast. It struggled through adversity and opposition, and by the unpaid labor of years, proved itself worthy of the success which finally crowned its efforts. At this juncture the Toland College stepped in to reap the harvest planted by its predecessor. The Faculty of the old school felt that their services in the cause of medical education, and their claims on the profession and on the public, ought not to be thus ignored by their confreres. But rather than exhibit to the world the picture of two schools contending for patronage not sufficient to compensate one, and dividing and distracting the profession in California and still further debasing—it might be—the standard of education, they determined to avoid contention by suspending operations. Most of them, on invitation, attached themselves to the Toland school, and gave it an honest and hearty support. After several years of trial, for reasons to them satisfactory and cogent, they have withdrawn and re-organized the Medical Department of the University of the Pacific. This re-organization has been effected by the old and well tried teachers, and with all the equipments necessary for a complete course of medical instruction, and such as are not possessed by any other school on this coast. Their present class comprises a large majority of the students. They feel that they enjoy the confidence of the profession and of the community. They do not, however for these or any other reasons, claim indorsement or support from the University of California. But they may certainly protest against the University, as an independent and impartial body, representing the entire State, and supposed to act with a single eye to the promotion of every educational enterprise, giving its name and patronage exclusively to a rival institution, and making itself a party adverse to the pioneeers in an important department of education.

Respectfully, etc.

The intention of this communication is perfectly obvious. Nevertheless, the suggestions are well worthy of the consideration of the Regents.

The separation of the power to confer diplomas from the educational schools is the first step to medical reform, and we see no reason why the Regents of the University should not at once adopt the suggestion, if there are no legal disabilities in the way. This medical Board chosen by them should be selected from the body of the profession at large, of those disconnected with either of the schools, or, at least irrespective of them. Were they to do this they would place California in the first rank of the States on the great question that is agitating the profession, viz: medical reform. A California medical diploma would then become a document of respectability. But we have no idea that the gentlemen who proposed it are sincere, or expect that the suggestion will be followed. They naively admit, "There may arise some difficulties in carrying out the proposed plan." We venture to say that one of the difficulties they anticipate is that neither of the schools would surrender to the State University the right they hold by charter to confer diplomas. The gentlemen who make the proposition could not do it, having no charter of their own; they acting under the charter conferred upon the Methodist College at Santa Clara, cannot surrender what is not theirs. It is like an old soldier's coat picked up by the wayside, in which a beggar may strut and throw aside to be assumed by the next that passes by. And then what would become of the Medical Department of the University of the Pacific (Ocean?) when deprived of this great privilege? What would they have to offer to ambitious young men more than any other similar number of medical men could offer in their own offices? Without a single facility for giving a medical education, why not confer the diplomas at once and let the aspirants for medical honors go home and begin the war upon the human family, and let the "faculty" do likewise and end the farce.

We have no patience with the series of falsehoods with which the last half of the protest is made up. It requires an immense amount of cheek to stand up in this community and say that "they enjoy the confidence of the profession and of the community" in their capacity as a medical school. There is and always was a deeply-rooted contempt for what was known as the "Medical Department of the University of the Pacific," *alias* the "Mission St. School," *alias* "The Cooper Shop," and for the acquirements of the recipients of its diploma. The community still suffers from the infliction of them as medical men upon it. Some of them are recognized as worthy and intelligent members of the profession, but their qualification is due to their own energy of character, and opportunities outside of, and in spite of their college disadvantages.

"It struggled through adversity and opposition," say the memorialists, "and by the unpaid labor of years, proved itself worthy of the success which finally crowned its efforts." Could audacity go further? Yes, it goes further: "At this juncture, the Toland College stepped in to *reap the harvest* planted by its predecessor. The faculty of the old school felt that their services in the cause of medical education and their claims on the profession and on the public ought not to be thus ignored by their confreres. But rather than exhibit to the world the picture of two schools contending for patronage not sufficient to compensate one, and dividing and distracting the profession in California, and *still*

further debasing, it might be, the *standard of education*, they determined to avoid contention by suspending operations. Most of them, on invitation, attached themselves to the Toland School, and gave it an honest and hearty support. After several years of trial, for reasons to them satisfactory and cogent, they have withdrawn," etc. Why did they not tell the reasons for withdrawal? What a pretty excuse it would offer for now "distracting the profession in California." Can any of these gentlemen believe that the profession in California are particularly concerned whether they have two schools or a dozen, or whether they have any at all? For all the sacrifices they have made we feel the profoundest sympathy. The wonder is that men can be found willing to resume such self-sacrificing labors. If it has not paid to advertise oneself throughout the breadth of the land, for years as *professor* of a medical school, we are sorry for it. It ought to pay in some way for the scorn which they could not have failed to read in the faces of all right-minded men at home, and whom they have had to confront in their daily rounds.

We are not willing to allow history to be so falsified as is done in this memorial, and as evidence of the truth of what we assert respecting this Medical School, we refer to the *Pacific Medical and Surgical Journal*, Vol. II., page 497, et. seq., for what was eleven years ago the true expression of the public sentiment of the profession respecting it. We make room for the following sentence only: "We hope our Atlantic brethren will not be deceived; the Pacific Medical College is now a legitimatized sham—a legal humbug, a chartered advertising medium for the man of whose advertisements we have spoken above. The College is in his infirmary, and all the appurtenances thereunto belonging."

As it was in the beginning it continued to be till the death of it founder, when it lingered a miserable existence for a short time, until Dr. Toland erected the fine building which bears his name, established the school and obtained a charter.

The profession will not endorse any school, however well endowed, that does not require of its teachers that they shall be men of good moral character, capable of teaching, and show a decent regard for the professional code.

The University of the Pacific *redivivus* is composed of the surviving elements of the old one with some respectable additions who are uninformed of the status of the old school, and have been drawn into a movement that can result in no good to them or serve any good public purpose. It originates in jealousy and revenge, in a rule-or-ruin disposition, in which no one outside of their own clique has any sympathy. The objections that have been urged by many of our most respected physicians against the Toland College cannot be urged by the bolters from it.

We have recognized no medical school in our midst, nor shall we until one is organized on a basis that will give assurance that the voice of the profession can be heard in its councils, and whose supervision shall not be in the hands of an actual Board of Trustees or Regents.

We can recognize but one University and that must be the public one, in which we all have an equal interest. The University of the Pacific has only an existence on paper; like many of our celebrated mines, it was merely a preëmptors claim, staked out, but never improved, and it has not the vitality to throw off any parasitical club that may seek to work under its charter, much less to influence its character or control its conduct—it is therefore wholly irresponsible.

If the time has arrived that a medical school is needed, and the facilities can be afforded for practical instruction, we hope, and as far as we can learn, it seems to be the desire of the profession that the Regents of the University should accept the property of the Toland College, and erect on it, as a basis, the Medical Department of the University of California, unless some one shall make an endowment more liberal than Dr. Toland's to the purpose of medical education. The so-called "Medical Department of the University," has nothing to give and should have no hearing beyond their individual characters in the matter.

We still hold, however, to the belief that the suggestion in the first portion of the protest is the best if practicable, but to that end it would be necessary for the Legislature to revoke the charters conferred upon all other associations to confer the medical diploma.

It may be possible to combine both of these features, and such an arrangement is said to be in contemplation by the Regents. Such a consummation would give us a nucleus around which the medical men of California could organize, and the Regents of the University would make themselves the agents for effecting that which the profession has failed thus far to effect for itself.

WOMAN'S MEDICAL COLLEGE OF NEW YORK.

We have received the annual announcement of the Woman's Medical College of the New York Infirmary.

We are not among the number that would debar woman from any occupation in life to which her

genius, inclination or necessities may impel her. Whatever inconveniences may attend her in the practice of the medical art, she has to bear and not we, and therefore we have no right to object on that ground. That she is peculiarily fitted to discharge many of the duties of the family physician cannot be denied; that the sphere of her activity is daily widening and will continue to widen in the times that are coming, must be manifest to all, and will be hailed with pleasure by every man who is not a bigot or a slave to his prejudices.

We greet the Woman's Medical College of New York with fraternal salutation and hope women will find there every facility for the acquirement of a sound medical education, in a school of their own, and not find it necessary to shock the modesty of our refined young male students by presenting themselves at their cliniques, and we should have no desire to intrude upon theirs.

The course of study is full, their teachers of acknowledged ability, and the Board of Examiners composed of some of the most eminent members of the profession in that city. The plan of instruction which this school designs to carry out is arranged to secure a graduation of studies through the three years of the student's course. This is as it should be in every medical school. Yearly examinations are to be held at the close of each session.

The graduates this year numbered five, and the class twenty-six. We wish the school every success that it shall merit, and will greet its graduates with all the honors should they, or any of them, venture to come to California. Standing on our own platform as they will, we should not feel called upon to exhibit our gallantry, and a true woman would never ask it of us, but she has a right to expect of us the courtesy that becomes gentlemen.

NATURAL HISTORY OF RHEUMATIC FEVER.

The last volume of the Transactions of the Medico-Chirurgical Society, contains the concluding paper, by Drs. Gull and Sutton, on the analysis of cases of rheumatism treated with mint water, or in other words, by absolute rest and regulated diet, unaided by medicines. The object of this paper was "to point out what appears to be the natural course of rheumatic fever with reference to the heart; to show in what proportion of cases the heart has become diseased, when the patients were treated by mint water, and to consider if there be any evidence to prove that the heart is more frequently involved where cases are treated by mint water, or when treated by alkalies, lemon-juice, or by the application of blisters to the joints. The report is based upon twenty-four cases carefully analyzed. The conclusions arrived at are as follows:

1st. That rheumatic fever uncomplicated with any very severe heart affection tends to run its course in nineteen days, calculating from the time the rheumatic symptoms first set in to their termination.

2. That the average duration of the acute symptoms while patients were in the hospital, and free from very severe heart complications, was nine days.

3. That in nearly all the cases referred to in the paper, there was some modification of the heart's sounds during some period of the rheumatic attack.

4. That severe pericarditis complicated with pneumonia, may subside and leave the heart healthy, so far as we can test by our present means, without the aid of any drugs.

5. That when the heart was healthy on admission, it was very rare for it to become diseased while the patients were under treatment by mint water, or, in other words, when the rheumatic fever was allowed to run its natural course.

6. That the evidence before the profession shows that the heart very rarely became diseased while the patients were under treatment (in the hospitals.) And that this was the case when the patients were treated by alkalies, lime-juice, or blisters to the joints.

7. That there is not sufficient evidence before the profession, to prove that any of the advocated remedies have power to prevent the heart becoming diseased.

8. That in concluding that the treatment has prevented the heart becoming diseased, we have overlooked the fact that there might be no tendency at the time the patients were under treatment for the heart to become diseased.

9. That in rheumatic fever the tendency is for the heart to become diseased during the first few days of the fever, and should it escape the early days of the disease, there is each day a lessening tendency to its implication; hence our cases would appear to show that if at the end of the first week of the rheumatic fever, the heart is free from disease, there is little or no tendency for it to become diseased during the later weeks, provided patients are treated by rest and regulated diet.

10. That the reason why the heart did not become diseased when rheumatic fever was treated by alkalies or blisters to the joints, is to be attributed not to the influence of the drugs but to the natural course of the disease. For the patients did not come under treatment until the disease had been going on some days, and until the period when the heart was most liable to become diseased had passed over.

We ought not to conclude the paper without expressing our convictions that, hitherto the investigation into the therapeutics of the rheumatic process have been rendered all but valueless by the deficiency in preliminary data. There are as yet no reliable facts in the pathology of the process; we are ignorant of the essential state of which the rheumatic symptoms are an expression.

At present therefore, as regards treatment, our cases seem to show that we are limited to a careful regimen of the patient. Rest, mechanical and physiological. Rest in the very outset of the disease. We ought not to wait until the rheumatic process has become well developed in the joints, for it appears to us that the heart becomes involved simultaneously with the joints, and by rest we hope to quiet the heart's action and so prevent it becoming diseased.

To regulate the temperature; to moderate excessive skin function by sponging the surface of the body with tepid water;

to allay pain by placing the patient in an easy posture, and sometimes by opiates; to sustain the organic nerve power by light diet, and occasionally by small doses of alcohol; to procure rest by the most simple means, especially avoiding such movements of the body as may excite the circulation. In fine, to place the patient in a physiological state of mean rest, if it may be so expressed, of the nervous, the circulatory, the muscular, and the digestive systems.

To do this fully will often tax all our energies, and we should not be just to ourselves if we did not here say that to attain this has been the object of our greatest care. It required often more consideration than was requisite for prescribing any supposed appropriate drug treatment. We are therefore, at present, advocates of the exactest treatment of the patient under acute rheumatism, though we may doubt the value of so-called specific drugs.

THE PRACTITIONER.

The second volume of that new Monthly closed with the month of June. Few medical journals have gained so rapidly in professional favor as the *Practitioner*. English journals are for the most part so lumbered with discussions of subjects of local interest, that a busy practitioner has no time to cull what is of interest to him. The *Practitioner* on the other hand addresses itself to every medical man who reads the English language and desires to keep himself posted in the progress of the therapeutics of his profession. It is amongst the most cherished of our exchanges.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

Luther Parks, M. D. announces his withdrawal from the editorial management of the *Boston Medical and Surgical Journal*. This intelligence will be received by the many readers of that periodical with regret. Under his supervision it has attained a rank that places it in the first class of medical periodicals in the English language. The future editor will be Dr. Francis H. Brown, whose duty will be to maintain the *Journal's* popularity. More than that cannot be hoped for.

JOURNAL OF THE GYNÆCOLOGICAL SOCIETY OF BOSTON.

The second volume of this able Monthly comes to us from the publisher, James Campbell, neatly bound, and we give it a place on our shelves, to be kept for future reference. We have had occasion to quote frequently from its pages in the course of the year, and its character is too well known to our readers to need any further notice at this time.

☞*Readers of the* California Medical Gazette *are invited to send us copies of local Newspapers, and similar publications, from all parts of the country, which contain matters of interest to the profession. They will be thankfully received and acknowledged under "Communications received."*

MISCELLANEOUS.

HYDRATE OF CHLORAL, WITH CASES ILLUSTRATING ITS ACTION.

By Edward H. Clarke, M. D., Professor of Materia Medica in Harvard University.

Chloral was discovered by Liebeg in 1832. Its chemical properties were more fully investigated by Dumas in 1834. It was afterward studied by MM. Regnault, Kopp and Wurtz. It was known, however, chiefly or only to chemists, and regarded by them more as a curiosity than an article of value, till M. Liebreich, of Berlin, introduced it in the form of hydrate of chloral into therapeutics. Since then its physiological and therapeutical action has been investigated by MM. Bouchut, Bricheteau and Demarquay of France, Dr. B. W. Richardson, J. B. Russell, of England, Dr. William A. Hammond of New York, DaCosta of Philadelphia, and others both in this country and Europe. It has been tried both in hospitals and in private practice. On the whole, the verdict of the profession is in its favor. Its probable value as a therapeutic agent is such that clinical observations with regard to its action in disease are interesting and important. It is moreover interesting as an admirable illustration of the close alliance between the chemical constitution, the physiological action and the therapeutical use of drugs. This alliance is becoming every day more apparent, and the time is not far distant when it will be generally recognized by the practising physician, and constantly guide him in the art of prescribing.

Chloral, from which the hydrate is made by the addition of water, is described by Dr. Benj. W. Richardson, the distinguished London physician and physiologist, as "an oily liquid, colorless, and of pungent odor. It is an irritant to the skin. Its specific gravity is 1500 as compared with water at 60°; its vapor density is 74 compared with hydrogen as unity; and its boiling point is 99° Cent.—210° Fahr." It is made by treating anhydrous alcohol with chlorine.

The hydrate of chloral is made by combining chemically water and chloral. This is described by Dr. Richardson, in the article just quoted, as a "white crystalline substance The crystals are rhombic. In the formation of the hydrate, about eight parts of chloral combine with one part of water, forming nine parts of the crystalline substance. Hydrate of chloral, therefore, contains 90 per cent. of chloral. The hydrate, although a solid, volatilizes like camphor without decomposition. It disolves in water so freely that a saturated solution contains 50 per cent. It dissolves also in alcohol and ether." We learn from the same authority that when it is acted upon by an alkali, as potassa, soda or ammonia, it is decomposed into a formate and chloroform. If any quantity of potassa is added to a solution of hydrate of chloral, a corresponding amount of chloroform is evolved. The presence of the latter agent may not only be detected by the milkiness of the fluid, but by the characteristic odor of chloroform. This fact of the evolution of chloroform from the hydrate of chloral, when the latter is put in contact with alkalies, is an important practical one to the physician. It not only indicates the impropriety of uniting an alkali with the hydrate of chloral in prescriptions, but it points to the most probable explanation of its physiological action. Some account of this action will form an appropriate introduction to the clinical observations that follow.

Physiologists have experimented with hydrate of chloral upon all classes of animals. Its action has been studied on

fishes, frogs, rabbits, cats, mice, dogs, pigeons, and I know not how many other living creatures as well as man. Upon all of them it exerts a certain similarity of action, though with some curious differences. When fishes are put into water sufficiently charged with it, they absorb it by inhalation, grow sluggish and presently fall asleep. Frogs fall asleep by the subcutaneous injection of half a grain; they are apt to be killed by three-quarters of a grain, and are sure to be killed by more than the latter dose. A quarter of a grain will put a mouse into a sound sleep. Rabbits come easily under its influence, whether given by the stomach or subcutaneously, and may be put into a gentle sleep, or narcotized or killed by it, at the will of the experimenter. Pigeons, that according to Weir Mitchell, tolerate enormous doses of opium with impunity, are easily narcotized by hydrate of chloral. Cats come readily under its influence, and when subjected to it they are said to purr with obvious comfort as they go to sleep.

We learn from the admirable researches of Dr. Richardson, that the sleep induced in all sorts of animals by hydrate of chloral resembles natural sleep. Recovery from this sleep is unattended with any apparent derangement of the system. The drug may be administered in doses just large enough to produce this sort of natural sleep, or in doses large enough to produce a dangerous degree of narcotism, or in doses that shall rapidly prove fatal. In other words, the hydrate of chloral is to animals a pleasant and harmless anodyne, or a dangerous narcotic, or a rapid and fatal poison, according to the dose in which it is given. In this respect its action on animals resembles its action on man. When death is produced, the heart seems to be the ultimum moriens. The circulation may be seen going on in the web of a frog's foot, when the animal is so profoundly under the influence of the drug as to appear dead.

Muscular relaxation, complete anæsthesia, absence of reflex movements and reduction of animal temperature, in varying degrees, dependent upon the doses given, accompany the narcotism of hydrate of chloral. An apparent hyperæsthesia has sometimes been noticed, especially by M. Demarquay, but it is an occasional and exceptional phenomenon.

A knowledge of the physiological action of the hydrate of chloral on man is an indispensable guide to its use in disease. We do not yet comprehend this ac ion completely, but we know enough of it to aid us materially in its clinical administration. The points of greatest importance to the practitioner are its absorption, its elimination, the changes which it undergoes in its progress through the system, and its action on the system, from the period of absorption to that of complete elimination.

1st. *Absorption.*—Hydrate of chloral is readily absorbed by the mucous surfaces of the stomach and rectum, and also by the cellular tissue. For absorption by the latter tissue it should be administered by subcutaneous injection. This procedure, on account of the local irritation which it induces, is not one to be recommended. The ordinary method of giving it by the stomach is the best. If concentrated when thus given, it produces local irritation and nausea, and is apt to be thrown off. It is easily and quickly absorbed from the stomach if largely diluted. I have usually found that a solution stronger than a grain of the hydrate to a drachm of water will produce gastric uneasiness. When diluted to this or to a greater extent, it is well tolerated by the stomach. If a moderate dose is given, viz. one of thirty grains or less, it is probable that the whole of it is absorbed in a few minutes. In the first of the following cases, the hypnotic effect was produced in ten minutes after the administration of the drug. As the dose of it in that case was only fifteen grains, it is fair to infer that the whole, or nearly the whole of the quantity given passed from the stomach into the blood within that space of time. The stomach appears to be capable of passing into the blood any quantity of hydrate of chloral that may be put into it, provided that the article is pure and sufficiently diluted. Hence any quantity of it may be given at a dose, so far as the stomach is concerned, that it is wise to administer. The presence of food in the stomach would be likely to delay its absorption. Any irritation of the stomach, like gastritis, would probably render that organ intolerant of it, though I have never proved this by experiment. The absorption of the hydrate of chloral by the stomach, then, is easily and quickly induced when it is given largely diluted upon an empty stomach whose mucous membrane is in a normal condition.

2d. *Progress through the System.*—The hydrate of chloral goes from the stomach into the blood unchanged. In the blood it meets with an alkali. The experiments of Dr. Richardson and others show that the hydrate of chloral in contact with an alkali is decomposed and chloroform evolved. Indeed, chloroform has been obtained from the vapor arising from a mixture of freshly drawn blood and hydrate of chloral. We have the authority of Liebreich for stating that when the hydrate meets with an alkali in the blood, it behaves as it does when it meets with alkalies out of the system. That is, as soon as hydrate of chloral reaches the blood by any avenue, it commences to yield chloroform. The amount of chloroform thus given to the blood is proportionate to the quantity of chloral absorbed and also to the alkalinity of the blood. The total quantity of chloral absorbed is not immediately decomposed into chloroform. The drug mixes with the blood, passes with the blood to every part of the organism, and, as it circulates, continues to yield chloroform until it is exhausted. In cases of fever of a low type, such a typhus and typhoid fever, when the blood is highly charged with ammonia, that fluid is in a state to extract chloroform from chloral more rapidly than when it is less alkaline. Under such circumstances a given dose of hydrate of chloral should produce its physiological action more rapidly and powerfully than it ordinarily does. Since writing these words I have met with the clinical experiments of Dr. J. B. Russell with the hydrate in typhus fever, at the Glasgow Fever Hospital, and these indicate that such is the case. Doubtless other substitution compounds than chloroform result from the decomposition of hydrate of chloral in the blood, and exert more or less influence on the organism till they are eliminated from it. What these compounds are, and what their physiological action is, cannot yet be stated. It is probable that some of the physiological actions of the drug we are considering are due to these compounds. Until they are discovered and their effects known, a complete solution of the problem of the physiological action of hydrate of chloral is impossible.

The above theory of the decomposition of hydrate of chloral in the blood into chloroform, not all at once, but with comparative slowness, particle by particle, just as fast as a particle of chloral meets with a sufficient quantity of an alkali, is that of Liebreich. It is a beautiful and ingenious theory, and one that seems to me justified by physiological experiment and clinical observation. The chloroform, yielded by the chloral to the blood, of course behaves in that fluid just

as the same amount of chloroform would do if it were passed into the blood at the same rate by any other process. Hence hydrate of chloral, according to its dose, may be soporific, anæsthetic or dangerous because it yields chloroform. But it is not probable that in moderate doses it will ever prove dangerous, because in such doses the chloroform evolved will be eliminated too rapidly to be so.

The hydrate of chloral, then, passes rapidly from the stomach into the blood unchanged. In the blood it is decomposed into chloroform, and perhaps into other compounds also. These substitution compounds continue to circulate with the blood throughout the organism, until they are oxidized in it or eliminated from it.

3d. *Elimination.*—Most, if not all, of the hydrate of chloral is eliminated from the system in the form of chloroform, into which it has been changed. Dr. Richardson states that he has detected the odor of chloroform in the breath of animals sleeping under the influence of chloral. Messrs. Lallemand, Perrin and Duroy have shown that chloroform is eliminated chiefly by the pulmonary mucous surface. They have also shown that when it is rapidly introduced into the organism it is more rapidly eliminated than when it is slowly introduced. When it is slowly introduced, at least an hour and a half is required after the introduction of the last dose, that is, after the last quantity of it has been inhaled, for its complete elimination from the blood. So far as we know at present, the elimination of the hydrate of chloral is the same as the elimination of chloroform slowly introduced into the blood. So much of the hydrate as has been changed into chloroform is eliminated by the pulmonary mucous surface in an hour and a half, or less, after its absorption. When, therefore, it is desirable to keep the blood charged with the hydrate of chloral continuously, it should be given at intervals of not more than two hours. If this is undesirable, a second dose should never be administered until sufficient time has elapsed for the elimination of the first. The practitioner should select one or the other of these modes of administration, in accordance with the therapeutic object he has in view. How any of the other substitution compounds of the hydrate of chloral are eliminated, we do not yet know. They are probably oxidized in the organism.

4th. *Action on the System.*—Hydrate of chloral, while in the system, affects especially the blood, the cerebro-spinal axis, the heart and arteries, the muscular system, and the temperature.

When a single therapeutic dose of chloral is administered, it passes into and out of the blood without producing any chemical change in that fluid. If the dose, however, is so large as to be a toxicological one, the blood undergoes a change. It becomes, as we learn from Dr. Richardson's experiments, less coagulable, and its corpuscles become shrunken and crenate; it is in fact devitalized. In this respect, the action of chloral on the blood resembles that of large or long continued doses of ammonia or potash. If chloral were administered in therapeutic doses for a long time, and with such short intervals between each dose, that its complete elimination from the blood, for at least a portion of each twenty-four hours, were rendered impossible, a devitalization of the blood would doubtless result. That such is not the case, provided chloral is given so as to allow for its daily complete elimination, we learn from clinical observation. Cases II., V. and VI. that follow are illustrations in point, for the patients there described took hydrate of chloral daily for many weeks, without loss of flesh, color, strength, appetite or other ill effects. I have said that in this respect the action of chloral on the blood resembles that of alkalies. Alcohol would have been a better illustration; for alcohol administered in therapeutic doses, for a long period, with such intervals between them, that the blood may be completely freed from it during a portion of each twenty-four hours, does not change the character of the blood, while it does change and devitalize the blood, if its daily and complete elimination is not provided for.

The physiological action of chloral on the cerebro-spinal system indicates its chief value in therapeutics. My own observation confirms the statement of M. Bricheteau that this action "is manifested by a period of agitation, more or less pronounced, sometimes very short, and not of importance; by a period of progressive somnolence, in which consciousness is first dulled and then extinguished under a profound sleep, accompanied by a slight or a complete anæsthesia, according as the drug is pure and given in a sufficient dose; and in some individuals, by a sort of intoxication, resembling drunkenness at the moment of awakening." Sleep and a certain amount of anæsthesia are two marked effects of therapeutic doses of chloral. Profound sleep and complete anæsthesia are the result of toxic doses. The sleep of a therapeutic dose is strikingly like natural sleep. The limbs lie in natural attitudes. The respiration is easy. The skin is normal, or a little cool. The pupils of the eyes are contracted, but easily dilate. A sufficient noise or disturbance arouses the sleeper, who asks what is the matter, and directly falls asleep again. The patient of Case II. was constantly anxious about an aged and invalid father, who slept in the chamber below her. Any unusual noise in that chamber at night always aroused her from her chloral sleep; she would leave her bed, go below for a moment, investigate the cause of the disturbance, return to her bed and at once fall asleep again. The duration of the sleep varies from two or three to six or eight hours, according to the dose and to the impressibility of the subject.

Complete anæsthesia is not produced by hydrate of chloral on man, unless doses that approach or really are toxic ones are given. Therapeutical doses produce a moderate insensibility, and therefore may be used to allay a moderate amount of pain, but they will not replace opium in this respect. The order in which the nervous system is affected by therapeutic and toxic doses is stated by Dr. Richardson to be as follows: Therapeutic doses affect, 1st, The sympathetic ganglia. 2d, The cerebrum. 3d, The heart. In fatal cases, "the functions destroyed are, 1st, The cerebral. 2d, The voluntary muscular. 3d, The respiratory. 4th, The heart."

The action of the heart is often quickened soon after chloral is absorbed, but in a short time the quickened action gives place to a slower and weaker movement. It is the rule for therapeutic doses to decrease the frequency and force of the heart's beat. In nine observations made by DaCosta, in one of which ten and in the rest fifteen grs. were injected hypodermically, the following result was obtained. In five cases the pulse fell in an hour from 90 to 78—104 to 86—96 to 82—96 to 44 and 100 to 96. In two cases the number of beats was unaltered; and in two it was increased from 60 to 64, and from 80 to 84. M. Bouchut, DaCosta and Dr. Anstie agree that the sphygmographic trace of the chloralized pulse is sinuous with a diminished rise and fall. Toxic doses render the pulse quick and small, and contract the arterioles, sometimes, says Dr. Anstie, "to the extent of strong spasmodic contraction."

The condition of the cerebral blood vessels, while under the

influence of hydrate of chloral, varies with the dose and with the length of time after its administration. Dr. W. A. Hammond has demonstrated by several ingenious and interesting experiments, that the primary effect of a full therapeutic dose is to cause congestion of these vessels, while the secondary effect is to induce the opposite condition. He has also shown that a small dose produces only congestion of the cerebral vessels. Such a dose is probably eliminated before there is time for secondary results to occur.

Animal temperature is lowered by chloral, if a sufficient dose is given. In all but one of DaCosta's cases just referred to, the temperature either fell slightly or was unaffected. In one case it rose from 99° to 100°.5. Bricheteau noticed the decrease of temperature. Dr. Richardson has confirmed it by fifty carefully conducted experiments. A comparison of the results arrived at on this point by these and other observers, however, points to decrease of temperature as the accompaniment of a toxic rather than of a therapeutic dose. An attempt to largely lower the animal temperature by chloral would be a dangerous experiment. I agree with M. Bricheteau that "the loss of one degree (centigrade) of temperature in an hour by the action of chloral would alarm me, if it occurred in one of my patients."

Under the influence of therapeutic doses of hydrate of chloral, the respiration is slowed as well as the action of the heart, but not to any great degree. Muscular relaxation also occurs.

Therapeutic Indications.—The therapeutic indications and contra-indications which these physiological phenomena point to, are obvious. Hydrate of chloral may be given so as to produce sleep, diminish sensibility, allay irritation, slow the heart, relax muscular tissue, lower animal temperature, devitalize the blood, cause anæsthesia and destroy life. Part of these phenomena have a therapeutic value, and part are toxic. They may be arranged in two groups, thus :—

Therapeutic Group.	Toxic Group.
Sleep.	Slow or irregular pulse.
Diminished sensibility.	Complete anæsthesia.
Diminished irritation.	Altered blood globules.
Muscular relaxation.	Great diminution of temperature.
Contraction of arterioles.	Great muscular relaxation.
	Death.

In the administration of chloral, the practitioner of course desires to obtain the therapeutic and avoid the toxic phenomena. This can easily be done by a proper attention to the purity of the article and to the mode of its administration. The indications to produce sleep, diminish sensibility and allay irritation, occur very often in the treatment of disease. Hence it is not surprising that chloral has been tried clinically in a great variety of diseases. Dr. James B. Russell has given, in the *Glasgow Medical Journal*, a table of 21 cases (of fever, previously referred to,) in which he employed it. M. Bricheteau, in the *Bulletin de Therapeutique* for November, 1869, has recorded the result of his experience of it in nephritic colic, extraction of teeth, chorea and tetanus. Dr. DaCosta, in an article in the *American Journal of the Medical Sciences*, quoted above, has presented a record of its use in lead colic, rheumatism, cerebral softening and abdominal tumor. Dr. F. Goolden tried it in paralysis; Dr. J. H. Barnes and Dr. Hammond in acute mania; Dr. S. Teller in puerperal mania; Dr. Hay (*Practitioner*, March, 1870) in puerperal convulsions; Dr. Hardy in neuralgia; Dr. H. Derby in iritis; and this article concludes with an account of its use in phthisis, insomnia, paralysis agitans, opium eating, hysteria, and cardiac diseases.

The contra-indications to the use of the hydrate of chloral have not yet been fully ascertained. Its physiological action on the heart is such as to render one very cautious about administering it in cardiac affections. In Case VIII. of the following series, pain in the cardiac region and fluttering of the heart followed so directly after the taking of chloral that I could not doubt its action on that organ in that case—an action which no physician would care to push farther. The experiments of Dr. Hammond show that it is not safe to prescribe it in all forms of disease of the head. Organic diseases of the heart, congestion of the brain, meningitis, and very probably cerebral anæmia, contra-indicate its use. An irregular pulse and a cold skin, occurring soon after the the exhibition of chloral, are signs of danger. Dr. J. R. Reynolds, in the *Practitioner* for March, 1870, records a case in which a dose of 45 or 50 grs. was followed in two hours "with cold extremities, and excessively rapid, weak, irregular and intermittent pulse; jactitation of limbs; an intolerable sense of sinking and oppression at the pit of the stomach; gasping breathing and confusion of thought." These symptoms disappeared as stimulants were given, and the patient rescued from imminent danger.

Dose and Mode of Administration.—In the first place, before giving hydrate of chloral at all, the physician should be assured of the purity of the article. I have experimented clinically with hydrate of chloral of English, German, French and American manufacture. In my hands the English has proved to be the best—the most agreeable to the taste of patients, accompanied with little or no nausea, and followed by no ill effects. The German and French article has caused some nausea and slight cerebral disturbance. I am sorry to add, that I have never given a dose of American chloral which has not produced a great degree of nausea, and been followed for twelve or twenty-four hours by headache and cerebral uneasiness. Chemists tells us that the hydrate of chloral is not pure unless when added to a solution of caustic potash, it will disengage the odor of chloroform without coloring the solution. Coloring the solution indicates impurity.

The average dose for an adult is 30 grs. A decided hypnotic effect is produced in some impressible individuals by 15 grs. It is not safe to exceed the dose of 60 grs. in the course of ten or twelve hours. I have noticed that 30 grs., given in two doses of 15 grains each, half or quarter of an hour apart, will produce less gastric uneasiness and greater hypnotic action than when given in a single dose. Theoretically, in consequence of the rapid elimination of the chloroform evolved from the chloral in the blood, such should be the case. It may be administered by the stomach or by the rectum, and it is not necessary to give a larger dose by the latter than by the former method.

M. Claude Bernard has shown that less chloroform is necessary to produce anæsthesia in an animal or a man previously narcotized by morphia, than in one to whom morphia has not been previously given. I have observed, clinically, that there is a similar mutual action between hydrate of chloral and morphia. Case VI. which follows, is an illustration of this fact. A fourth of a grain of one of the salts of morphia, followed in an hour by 15 or 20 grs. of hydrate of chloral, will produce a greater anæsthetic and hypnotic effect than a larger dose of either of them given alone. In many cases, where a certain dose of morphia is sufficient to allay pain, but not to produce sleep, it is better to follow the morphia by hydrate of chloral than to repeat the former.

In concluding this account of the physiological and therapeutical action of chloral, I cannot express my opinion of it more clearly than to quote the words of Dr. DaCosta in

the paper previously referred to, viz.: "that it is an important addition to our therapeutic means—chiefly however, as a hypnotic. Its actions as a destroyer of pain is limited; nor do I think it can compete with ether or chloroform to produce the insensibility requisite for surgical operations. Its chief value seems to be that of an auxiliary to opium, or to take its pl[illegible]hen opium is not admissible.'' As a hypnotic, hydrate of chloral is better than opium. Chloral sleep is better than opium sleep.

The following cases illustrate most of the physiological actions of therapeutic doses of hydrate of chloral which have been pointed out.

Case 1. *Insomnia.*—An old gentleman of more than 80 years of age had an acute bronchitis in the summer of 1869. He got well, and in the following autumn had a second attack of the same disease, and recovered from this. During the winter of 1869–70, he suffered from an irritable bladder, which tormented him for two or three months and then got well. In consequence of these various attacks he became weak, and lost appetite and flesh. His nights were often restless, and he frequently required some form of opium in order to obtain sleep. It was not necessary to give him a large dose. Twenty drops of tincture opii deodorata, or an eighth of a grain of the sulphate of morphia, were generally sufficient to enable him to get a requisite amount of sleep. Hyoscyamus, camphor, hops, &c., were tried without effect. Opium gave him sleep, but it also gave him a coated tongue and constipation of the bowels. It did not seem to diminish his appetite or disorder his stomach. I discontinued the opium and gave him fifteen grs. of chloral hydrate in three ounces of syrup tolu and water. This gave him several hours of quiet and apparently natural sleep. The same dose was repeated for a number of nights, with the same result. It was discontinued after a while, because he got well enough not to require any anodyne. This person came very quickly under the hypnotic influence of chloral. He fell asleep so soon after he swallowed it that I had the time measured, and found that, in one instance at least, he was asleep in less than ten minutes after he had taken it. He complained of no nausea, either at the time of taking it or on awaking. It did not seem to inconvenience him in any way. All the anodynes I tried him with, except opium and chloral hydrate, failed to induce sleep. Of these two, the latter served him much the best. The smallness of the dose in this case is worthy of remark. Perhaps at the age of 80 a smaller dose should be given than when a patient is 20 or 30 years younger.

Case II. *Insomnia.*—A lady, between 50 and 60 years of age, received a blow on her head ten or twelve years ago, by which the skull was depressed. The surgeons who were called did not think it safe or necessary to trephine the skull. She got well without any surgical operation. Since the accident her head has frequently disturbed her in the way of headache, sense of cerebral oppression, vertigo and the like, though on the whole she has enjoyed a tolerable degree of health, and been able to attend to her usual household duties. The principal difficulty has been insomnia. She has not been able to sleep more than three or four hours, at night. She reports her average sleep for the last ten years at three hours per night, and no sleep by day. After several nights of three or four hours sleep each, there would be a night of four or five hours sleep, and so on. All sorts of anodynes have been tried with her, such as hyoscyamus, opium, camphor, lupulin, ether, ardent spirits, Indian hemp, bromide of potash, &c. Of these, whiskey and Indian hemp produced the best results in the way of sleep. The bromide of potash did not cause sleep, and was followed by an intolerable sense of weight and discomfort in the head, and also by mental depression for many hours after it was taken. For the last few years none of these anodynes have been employed. The patient has got on with such sleep as came to her, unassisted. On the 13th of January last, I gave her twenty grains of chloral hydrate, which seemed to act favorably, but did not produce much increased sleep. The dose was increased each night, till 50 grs. were taken. This was followed by five hours of quiet, easy and apparently natural sleep From that date to this present writing, she has taken 50 grs. of chloral, in divided doses, every night, except a few nights, when it was discontinued to see what the result would be. When it was discontinued, she slept only three hours as before. On the other nights she has always slept five or six hours. She has complained of no sort of discomfort, either directly after taking the hydrate or at at any other time. There is one exception to this statement. She took some hydrate of American manufacture a few times, which was invariably followed by nausea for half an hour or more, directly after swallowing it, and by headache the next day.

Case III. *Phthisis.*—Miss S., a young girl of 16, with the hectic emaciation, cough and diarrhœa of advanced tuberculosis, during the past winter was especially troubled by her cough at night. It assumed an irritable and spasmodic character as soon as she lay down. Unfortunately, she did not tolerate opium well. I gave her ten grs. of chloral hydrate, and the dose was sometimes, not often, repeated once or twice during the night, so that she got (either 10 grs. or) from 10 to 30 grs. of chloral, in divided doses, during each night. The result was excellent for several weeks. The cough was quieted by each dose, and refreshing sleep followed, which generally continued about two hours. After a few weeks, the taking of the above amount of chloral was not followed by relief from coughing or by sleep. An increased dose produced nausea, and the drug was discontinued. In the case of this patient, the rapidity with which sleep was induced was as remarkable as in the first case.

Case IV. *Hysteria*—Miss T., æt. 47, has been subject for several years to neuralgia in various parts of the body, and to chronic inflammation of the ovaries. She has also had frequent hysterical symptoms and general nervous derangement. One of her most prominent difficulties has been, for the past few years, sleeplessness. When troubled in this way, the bromide of potassium formerly produced quiet sleep. During the past year, however, I have abstained from giving it to her, partly because it did not quiet her as much as formerly, and partly because it seemed to be wise for her to take as few drugs as possible. During last January she slept so little that it became necessary to interfere. I accordingly gave her chloral hydrate. She took sometimes thirty and sometimes forty-five grs. in solution on going to bed. The immediate effect was generally to produce a slight amount of nausea. This lasted rarely more than fifteen minutes, after which she went to sleep, and slept quietly for several hours. For nearly three months, from the last week in January till the first of May, she took chloral more than two-thirds of the time at night. There were a few occasions when the largest dose above mentioned failed to cause sleep, and I did not wish to increase the quantity. These occasions were times of unusual excitement. Excepting these, she always got a sufficiently good night from the drug. Besides

the temporary nausea just referred to, it produced no ill effects. There was no headache, indigestion or discomfort during the day. She did not go to sleep so soon after taking chloral as I have usually seen persons do. Sometimes more than an hour elapsed after taking it, before sleep was induced.

Case V. *Paralysis Agitans.*—A man between fifty and sixty years of age, had the first symptoms of paralysis agitans more than ten years ago. The disease has steadily progressed, exhibiting the tremors, paralysis, forward stoop and accelerating walk that are so characteristic of it. During the past year, it has evidently been approaching its final stage. The jactitations have not been entirely suspended by day at any time lately, and have often aroused him at night. He has suffered from intense pain and weariness, and been unable to feed himself, or read or help himself at all. On lying down at night, the jactitations have been violent enough to shake the whole bed perceptibly. He was often one or two hours shaking in this way on his bed, before he fell asleep. If he awoke during the night, which not unfrequently happened, he had to go through another long process of shaking before sleep calmed him again. He awoke early each morning, and directly upon awaking the tremors began again, to stop only when another night's sleep brought him a little respite from them. Considerable relief was obtained from morphia, after conium, valerinate of zinc, Cannabis Indica, &c., had either been tried and failed to do any good, or had ceased to afford relief. The relief which morphia yielded was partial, and it was necessary to increase the doses steadily in order to get much benefit from it. On Feb. 9th I gave him 20 grs. of choloral hydrate, with directions to repeat it if necessary. The effect of the first dose was most fortunate. In about ten minutes after it was swallowed, the jactitation ceased. Presently he fell asleep. In a few hours he awoke and got a second dose, with an equally good result. From that night to this present writing, a period of more than three months, he has taken every night from 40 to 60 grs. of chloral in divided doses, and has usually slept an average of eight hours, peacefully, after the taking of it. Two or three times, he has tried an article of American manufacture, and then has suffered from nausea, directly after swallowing it, and from a disturbed head on the following day. Excepting these occasions, it has produced no apparent ill effects. I cannot see that it has checked the progress of the disease, or done other good than the unspeakable one of giving him rest from jactitation and pain, one-third of each twenty-four hours. His own estimate of the value to himself of the relief thus obtained may be gathered from the fact, that when, not long ago, there happened to be a short supply of foreign chloral in Boston, he bought up all there was in the city, lest he should be deprived of it for a time.

Case VI. *Opium Eating.*—An octogenarian lady took morphia by the advice of her physician thirteen or fourteen years ago. She continued to take it of her own accord afterwards, and has persisted in the habit thus acquired. She now takes about two grains of sulphate of morphia every night. In consequence of an attempt to discontinue its use, awhile ago, she became restless, excited, nervous and sleepless, with symptoms not unlike those of delirium tremens. After two or three days and nights had elapsed without sleep, I gave her 15 grs. of chloral hydrate. This quantity calmed her. A second dose of the same amount was followed by a sleep of several hours. Unfortunately, the habit of taking morphia could not be broken up, and she resumed her customary dose at night. This has quieted and comforted her, but has not always induced sleep. When it has not, 15 grs. of chloral have always been sufficient to put her to sleep in a short time. Less chloral was required to produce sleep when morphia had been previously administered, than when the latter article had not been given. There is a physiological explanation of this fact which has previously been referred to.

Case VII. *Phthisis.*—Mr. E., æt 28, died of phthisis not long since. The disease ran a rapid course. He was not troubled by a cough any more than most phthisical patients are; perhaps not so much as the majority are. For the last two months of his life, he required some sort of anodyne every night to enable him to obtain a necessary amount of sleep. For this purpose I gave him 15 grs. of chloral hydrate in solution, with directions to repeat the dose according to circumstances. Sometimes one dose was enough to quiet him sufficiently for the night, and sometimes he took two or three doses before rest was procured. The anodyne action of the drug was so satisfactory, that it was undesirable to try any other. He took chloral nearly every night for the last two months of his life. No unpleasant effects were observed.

Case VIII. *Organic Disease of the Heart.*—Mr. S. æt. about 40, has suffered for many years past from valvular disease of the heart, the sequla of rheumatism. Last April he was attacked with an ulcerated sore throat and otitis of the right ear. The inflammation of the ear terminated in a central perforation of the membrana tympani of that ear. During convalescence from the acute attack of the throat and ear, he complained greatly of tinnitus aurium and a sense of unusual discomfort in his head. These disturbed him so much that his sleep was seriously interfered with. With the hope of relieving him, I gave him 15 grs. of chloral hydrate at night, with directions to repeat the dose in half an hour if necessary. He went to sleep shortly after taking the first dose. On the next morning, he asked me if chloral ever affected the heart. I replied by asking why he put the question. "Because," he answered, "in a minute or thereabouts after swallowing the drug, I felt pain in the region of the heart, together with palpitation. The pain and palpitation soon passed away, and I fell asleep." He did not know that chloral slows the action of the heart, or in any way affects that organ, so that his imagination did not prompt or excite the symptoms. He was moreover a man whose intelligence and temperament were such that he could be trusted to watch his own symptoms. I therefore advised him to repeat the chloral, and to ascertain if possible whether it did or did not act upon the heart as he supposed. He accordingly took it for three nights consecutively, in the dose of 15 grs. each night. Before taking it, he undressed and got into bed. Then laying his hand over his heart, he ascertained that the impulse and turbulence of the organ were not greater than what he was accustomed to. When these facts were determined, he swallowed the chloral. Directly, that is, in one or two minutes, as he reported to me, he felt a change in the character of the heart's action. The heart beat more irregularly—fluttered is the term he used—and with the fluttering came pain in the heart's region. The symptoms might be called anginiform. They continued less than a quarter of an hour, and then passed away. This experiment was repeated three times with the same result. I did not care to continue the experiment beyond this, or to increase the dose.

Case IX. *Insomnia.*—Mrs. P., æt. 48, has menstruated

irregularly for the past year or two, and has suffered from many of the symptoms incident to her age. Insomnia has perhaps been the most persistent and trying of all of them. I have not given her opium in any form. Indian hemp, hyoscyamus, etc. have not rendered her much service, but she has received great benefit from chloral hydrate. She has taken it in doses varying from fifteen to thirty grains. Sometimes one and sometimes two doses have been requisite to produce sleep. When she has required it, sleep has always followed, and there have been no unpleasant effects subsequently.—*Boston Med. and Surg. Journal.*

CHLORAL HYDRATE.

This new remedy is attracting so much attention in the profession, and is without doubt destined to occupy so important a place in our materia medica, that we continue to reprint such important testimony regarding its effects as appears in the current medical literature of the day, to the exclusion of original articles of much interest.

THERAPEUTIC NOTE ON CHLORAL.

By Sir James Y. Simpson.

Sir J. Y. Simpson gives (*Med. Times and Gazette*, Jan. 1, 1870,) a very interesting account of his experience with chloral. He thinks that this remedy will prove of immense value in the practice of Medicine, surgery, and midwifery.

"Hitherto," he states, "I have principally employed it as an hypnotic and anodyne. In sufficient doses I have found it, as a general law, as sure a producer of sleep and soother of pain as opium or any of its preparations. It is usually swifter in the induction of its narcotism, more tranquil in its action, and more prolonged in its effects than opiates are when taken as hypnotics; but above all, it seems in a great measure, free from some of the minor drawbacks and disagreeable accompaniments produced by a full and large dose of opium. In this respect it appears to me to fulfil successfully the indications which I predicted in the extract above given, of being a narcotic as powerful, and indeed more powerful, than opium, 'yet without either its direct constipating effects, or its indirect tendency to excite subsequent nausea, vomiting, etc.' The sleep induced by a full dose of it, steals on without any premonitory symptoms. It is usually deeper, and yet more quiet and calm, than that produced by opium; and it does not leave subsequently the thirst, dry throat and tongue, disturbance of stomach and appetite, and languor of mind as well as body, which most persons unaccustomed to the use of opium commonly feel after a deep and narcotic dose of that drug.

"Ever and anon cases are well known to occur in practice in which patients declare their inability to take opium in any form without suffering severely from nausea, faintness, restlessness, and other evil effects. In several such cases I have now used chloral as an hypnotic with perfect success. A patient here at present from New York assures me that the preparations of opium and other vegetable anodynes have always acted upon her as poisons, and without producing their usual hypnotic effects. 'Such,' she writes me, 'being my experience of anodynes, I was unwilling, as you remember, to take chloral, and hoped nothing whatever from it. It was administered to me in two half-doses, (thirty grains each;) the first dose, taken in the daytime, with light in the room and my people walking about, did not put me to sleep, but it soothed and calmed me completely. The second dose, given at night, was followed by nearly four hours of natural and refreshing sleep. I felt neither giddiness nor heaviness on waking, and neither then nor later did I experience any sensation of nausea as after other anodynes.'

"Two or three weeks ago I had under my care an old patient, a lady of great sensitiveness and intellectual power, from one of the midland counties of England. When last in Edinburgh she was the subject of a slight operation, and twice took a dose of chloral at night to induce rest. She slept under it quietly and refreshingly, far beyond her usual breakfast hour. Opium, henbane, and other anodynes had, when used, generally induced in her disturbed sleep, occasional sleep-talking, and sometimes somnambulism. A few days before coming on this last occasion to Edinburgh, she had a conversation with her mother regarding the kind of monument which they should erect over the grave of her father, who died two or three months since. That same day she had traveled up from Wales, felt ill, and had given to her a dose of henbane toward bedtime, with the hope of producing rest. In the middle of the night her husband was awoke by the ringing of his door bell, a shower of small stones launched against his bedroom window, and the dog barking within. On rushing down and opening the door he found his wife, whom he believed to be in bed, standing outside. The henbane draught had produced a fit of sleep-walking. After her husband and she had fallen asleep she had risen, dressed herself in her day clothes over her night clothes, removing for that purpose her bonnet and muff out of their special receptacles, and, in the middle of a dark and wet night, had walked off to a distance of two miles. She awoke with her left hand holding her two gloves within her muff, and the right hand grasping the cold iron handle of the inner gate of the churchyard in which her father had recently been buried. After using the chloral she expressed to me great satisfaction at the idea that she had now a medicine which seemed to produce nothing but a tranquil sleep, quite different from the disturbing effects of the narcotics which she had previously taken; and two days ago I saw an order from England at the apothecary's for several doses to be forwarded to her.

"Sometimes chloral produces its hypnotic effects when opium, from its long-continued use, has ceased to do so. To a patient who has had daily morphia injected subcutaneously for some years for neuralgia of the side, under the hands of different practitioners, my assistant, Dr. Bell, gave at my request a drachm dose of chloral. Latterly a grain of morphia has been injected daily with the effect of relieving the pain, but without producing sleep. She swallowed the dose of chloral early in the afternoon, and was asked to lie down in bed. I saw her in a quarter of an hour afterwards deeply asleep; and the lifting of one eyelid to look at the dilated pupil did not awaken her. She awoke out of the slumber free from her neuralgia.

"I am not aware of any special contra-indications to the employment of chloral when used for somniferous purposes. Even in head and chest affections, where I should have been chary of having recourse to opium as an hypnotic, I have employed chloral with perfect success. The contra-indications to opium offered by a tendency to constipation, etc., do not exist against chloral.

"Like all other remedies in the pharmacopœia, it will no doubt occasionally fail to produce its desired effect; but as

seldom so, perhaps, as most of them. In a few instances the sleep induced by it has been dreamy and hysterical, particularly when the patient was not kept in a state of perfect quietude; but these are rare exceptions to the general rule.

"In the present remarks I have spoken specially of the somniferous or hypnotic powers of chloral. I have used it for other purposes, but it is not my intention to dwell upon them at present. It will not fulfil all the many and almost endless indications for which opium is used in medicine; but I have seen enough to convince me that it will prove a very valuable anodyne in some cases of neuralgia, hysteralgia, dysmenorrhœa, pleurodynia, etc., and in the pains attendant upon cancer and acute local inflammations. In some cases of irritable bladder and chronic cystitis I have found it give the patient much longer and more perfect rest than large doses of opium. In several instances it has seemed to me, when given in small and repeated doses, to soothe down both acute and chronic cough with remarkable effect; and I have known it to relieve asthma. Lately, in a young lady whom I saw in consultation with Dr. Taylor, suffering under a severe attack of congestive bronchitis with some hæmoptysis and orthopnœa, a small dose (twenty grains) of chloral was given at night. 'She speedily fell asleep,' wrote Dr. Taylor to me the next day, 'and slept soundly until 4 A. M., when she sat forward in bed and coughed, but appeared to be only half awake. When I called in the morning at 10:30 she was still enjoying a most placid slumber. 'As I contrast,' Dr. Taylor adds, 'the distress and audible breathing of last night with the tranquil sleep and improved state of the patient to-day, I cannot help concluding that chloral has a directly sedative effect on the whole respiratory surfaces.'

"Occasionally I have exhibited chloral in continuous small doses for one, two or more weeks in succession, and apparently with most marked benefit, particularly in cases of chorea, threatened or incipient insanity, etc. A patient from Illinois, who, for several years, has always regularly suffered excruciating spasmodic pain in the left iliac region, attended with some discharge, for eight days before menstruation began (she has disease of the fundus uteri and left Fallopian tube), has, during the last two periods, kept at bay this old and formidable suffering by taking chloral night and morning during the threatenings of it. She strongly assures me that formerly she had used very large doses of opium and other anodynes without any such favorable effect. I have found the parturient uterus to go on contracting regularly and strongly when the patient was so deeply asleep under chloral as to be only imperfectly awakened up with the expulsive effort of labor.

"The dose of chloral to an adult for an hypnotic which I have usually employed has varied from 60 to 70 grains; but 25 to 30 grains suffice in some patients. In a case of long-standing sleeplessness, and which has resisted great doses of opium, Indian hemp, etc., etc., 120 grains failed to produce any effect. When used for anodyne and other medicinal purposes, a continuation of smaller doses—as 10 or 20 grains several times a day—is sufficient.

"In administering chloral I have given it only by the mouth and by enema; almost always as a draught. It is some what acrid and pungent to most palates, and hence requires to be diluted well with water, and to have added to it a large quantity of syrup."—*Med. News.—St Louis Med. Journal.*

CORRECTION.

The article in the July number of the GAZETTE, on Professor Halford's treatment of Snake Bite, was contributed by E. H. Neill, M. D., of this city, but by an oversight of the printer was made to read Dr. E. H. Hall.

We cordially endorse the following from our New York namesake, and commend it to the attention of our co-laborers:

The *Chicago Medical Journal*, apparently quite satisfied with the present status of the profession in America, and imagining that all agitation for medical reform is confined to a few visionary Utopians on this side of the ocean, complacently says:

We give all due credit to the uneasy gentlemen who think they are engaged in the cheerful business of elevating the profession by loud declamation of their desires. But prior to adoption of the methods they wish to see in operation, we commend to them a remark of Lord Bacon: "Neither do I think ourselves yet learned or wise enough to wish reasonably; for as it asks some knowledge to demand a question not impertinent, so it asks some sense to make a wish not absurd."

As we have the utmost pride in classing ourselves among the uneasy persons referred to, we gladly assume our small share of the rebuke administered above, according to the Baconian system, and in reply refer our censor to the medical press of Great Britain and France, which is unanimous in urging the immediate reform of schemes of medical education and professional government, which there, are already as far superior to ours as Hyperion to a Satyr. We would almost agree to maintain contented silence for the rest of our lifetime if we could see as high a point attained here as that from which our British brethren start in their measures for further reform, and to submit cheerfully to what they call "the scandal" of only nineteen licensing corporations and the shortcomings of their Medical Council, if our licensing bodies were half as strictly supervised as theirs, and if we could have a central council of any sort. But we believe it to be quite possible to accomplish even more desirable results, and if the medical profession throughout America can be roused to united action, we do not despair of seeing the day when one or more colleges shall be voluntarily endowed so as to be nearly or quite independent of students' fees, and thus enabled to look for quality instead of quantity in their classes, and to make their preliminary requirements as strict as some of them would now do if they could; when there shall be but one standard of examination, irrespective of the teaching corporations; when, in a word, the possessor of an American degree shall be entitled to an honorable position in the medical profession throughout the world. We have in our single degree a simpler and better system than the British one with its several qualifications, to be obtained from different sources, and its multiplicity of medical titles, which confuse even their professors. It remains for us to guard the approaches to our one degree, so that none but the deserving shall attain to it.

Sir James Clark, Bart., whose death on the 30th ult. was announced by cable, was the son of a farmer, and born in Bannffshire, Scotland, in 1788. On leaving King's College, Aberdeen, he completed his medical education at the Edinburgh University. He afterwards spent some years in the navy, and in 1820 settled as a physician in Rome. In 1826 he returned to England and settled in London, where he soon acquired an extensive practice. On the death of Dr. Maton he was appointed physician to the Duchess of Kent and the Princess Victoria. On the accession of Victoria to the crown, she appointed Dr. Clark her first physician and created him a baronet. He was also physician in ordinary to the late Prince Albert. He was the author of works on climate, consumption, etc., and was a member of the senate of the University of London.

The following is so full of sarcastic humor, that we pass it around. Our readers need not be told its author. It was read at the dinner of the Massachusetts Medical Society, in May last, and appeared in the *Boston Medical and Surgical Journal.*

RIP VAN WINKLE, M. D.

AN AFTER-DINNER PRESCRIPTION

Taken by the Massachusetts Medical Society, at their Meeting held May 25th, 1870.

Canto First.

Old Rip Van Winkle had a grandson, Rip,
Of the paternal block a genuine chip;
A lazy, sleepy, curious kind of chap;
He, like his grandsire, took a mighty nap,
Whereof the story I propose to tell
In two brief cantos, if you listen well.

The times were hard when Rip to manhood grew;
They always will be when there's work to do;
He tried at farming—found it rather slow—
And then at teaching—what he didn't know;
Then took to hanging round the tavern bars,
To frequent toddies and long-nine cigars,
Till Dame Van Winkle, out of patience, vexed
With preaching homilies, having for their text
A mop, a broomstick—aught that might avail
To point a moral or adorn a tale,
Exclaimed—"I have it! Now then, Mr. V.!
He's good for *something*—make him an M. D."

The die was cast; the youngster was content;
They packed his shirts and stockings, and he went.
How hard he studied it were vain to tell—
He drowsed through Wistar, nodded over Bell,
Slept sound with Cooper, snored aloud on Good;
Heard heaps of lectures—doubtless understood—
A constant listener, for he did not fail
To carve his name on every bench and rail.

Months grew to years; at last he counted three,
And Rip Van Winkle found himself M. D.
Illustrious title! in a gilded frame
He set the sheepskin with his Latin name,
Ripum Van Winklum, quem we—scimus—know
Idoneum esse—to do so and so;
He hired an office; soon its walls displayed
His new diploma and his stock in trade,
A mighty arsenal to subdue disease
Of various names, whereof I mention these:
Lancets and bougies, great and little squirt,
Rhubarb and Senna, Snakeroot, Thoroughwort,
Ant. Tart., Vin. Colch., Pil. Cochiæ and Black Drop,
Tinctures of Opium, Gentian, Henbane, Hop,
Pulv. Ipecacuanhæ, which for lack
Of breath to utter, men call Ipecac;
Camphor and Kino, Turpentine, Tolu,
Cubebs, "Copeevy," Vitriol—white and blue,
Fennel and Flaxseed, Slippery Elm and Squill,
And roots of Sassafras and "Sassa'frill,"
Brandy—for colics—Pinkroot, death on worms—
Valerian, calmer of hysteric squirms,
Musk, Assafœtida, the resinous gum
Named from its odor—well, it does smell some—
Jalap, that works not wisely, but too well,
Ten pounds of bark and six of Calomel.

For outward griefs he had an ample store,
Some twenty jars and gallipots, or more;
Ceratum simplex—housewives oft compile
The same at home, and call it "wax and ile;"
Unguentum Resinosum—change its name,
The "drawing salve" of many an ancient dame;
Argenti Nitras, also Spanish flies,
Whose virtue makes the water-bladders rise—
(Some say that spread upon a toper's skin
They draw no water, only rum or gin)—
Leeches, sweet vermin! don't they charm the sick?
And sticking-plaster—how it hates to stick!
Eplastrum Ferri—ditto *Picis*, Pitch;
Washes and Powders, Brimstone for the——which,
Scabies or *Psora*, is thy chosen name
Since Hahnemann's goosequill scratch'd thee into fame,
Proved thee the source of every nameless ill,
Whose sole specific is a moonshine pill,
Till saucy science, with a quiet grin,
Held up the Acarus, crawling on a pin?
—Mountains have labored and have brought forth mice;
The Dutchman's theory hatched a brood of—twice
I've well nigh said them—words unfitting quite
For these fair precincts and for ears polite.

The surest foot may chance at last to slip,
And so at length it proved with Doctor Rip.
One full-sized bottle stood upon the shelf
Which held the medicine that he took himself;
What'er the reason, it must be confessed
He filled that bottle oftener than the rest;
What drug it held I don't presume to know—
The gilded label said "Elixir Pro."

One day the Doctor found the bottle full,
And, being thirsty, took a vigorous pull,
Put back the "Elixir" where 'twas always found,
And had old Dobbin saddled and brought round.
—You know those old-time rhubarb colored nags
That carried Doctors and their saddle-bags;
Sagacious beasts! they stopped at every place
Where blinds were shut—knew every patient's case—
Looked up and thought—the baby's in a fit—
That won't last long—he'll soon be through with it;
But shook their heads before the knockered door
Where some old lady told the story o'er
Whose endless stream of tribulation flows
For gastric griefs and peristaltic woes.

What jack o' lantern led him from his way,
And where it led him, it were hard to say;
Enough that wandering many a weary mile
Through paths the mountain sheep trod single file,
O'ercome by feelings such as patients know
Who dose too freely with "Elixir Pro.,"
He tumbl—dismounted, slightly in a heap,
And lay, promiscuous, lapped in balmy sleep.

Night followed night, and day succeeded day,
But snoring still, the slumbering Doctor lay.
Poor Dobbin, starving, thought upon his stall,
And straggled homeward, saddle-bags and all;
The village people hunted all around,
But Rip was missing—never could be found.
"Drownded," they guessed; for more than half a year
The pouts and eels *did* taste uncommon queer;
Some said of apple-brandy—other some
Found a strong flavor of New England rum.

—Why can't a fellow hear the fine things said
About a fellow when a fellow's dead?
The best of doctors—so the press declared—
A public blessing while his life was spared,
True to his country, bounteous to the poor,
In all things temperate, sober, just and pure;
The best of husbands! echoed Mrs. Van,
And set her cap to catch another man.
—So ends this Canto—if it's *quantum suff.*,
We'll just stop here and say we've had enough,
And leave poor Rip to sleep for thirty years;
I grind the organ—if you lend your ears
To hear my second Canto, after that
We'll send around the monkey with the hat.

Canto Second.

So thirty years had passed—but not a word
In all that time of Rip was ever heard;
The world wagged on—it never does go back—
The widow Van was now the widow Mac—
France was an Empire—Andrew J. was dead,
And Abraham L. was reigning in his stead.
Four murderous years had passed in savage strife,
Yet still the rebel held his bloody knife.
—At last one morning—who forgets the day

When the black cloud of war dissolved away?
The joyous tidings spread o'er land and sea,
Rebellion done for! Grant has captured Lee!
Up every flagstaff sprang the Stars and Stripes—
Out rushed the Extras wild with mammoth types—
Down went the laborer's hod, the schoolboy's book—
"Hooraw?" he cried—"the rebel army's took!"
Ah! what a time! the folks all mad with joy:
Each fond, pale mother thinking of her boy;
Old gray-haired fathers meeting—Have-you-heard?
And then a choke—and not another word;
Sisters all smiling—maidens, not less dear,
In trembling poise between a smile and tear;
Poor Bridget thinking how she'll stuff the plums
In that big cake for Johnny when he comes;
Cripples afoot—rheumatics on the jump,
Old girls so loving they could hug the pump;
Guns going bang! from every fort and ship—
They banged so loud at last they wakened Rip.

I spare the picture, how a man appears
Who's been asleep a score or two of years;
You all have seen it to perfection done
By Joe Van Wink—I mean Rip Jefferson.
Well, so it was—old Rip at last came back,
Claimed his old wife—the present widow Mac—
Had his old sign regilded, and began
To practice physic on the same old plan.

Some weeks went by—it was not long to wait—
And "please to call" grew frequent on the slate.
He had, in fact, an ancient, mildewed air,
A long grey beard, a plenteous lack of hair—
The musty look that always recommends
Your good old Doctor to his ailing friends.
—Talk of your science! after all is said
There's nothing like a bare and shiny head—
Age lends the graces that are sure to please,
Folks want their Doctors mouldy, like their cheese.

So Rip began to look at people's tongues
And thump their briskets (called it "sound their lungs,")
Brushed up his knowlege smartly as he could,
Read in old Cullen and in Doctor Good.
The town was healthy; for a month or two
He gave the sexton little work to do.

About the time when dogday heats begin,
Measles and mumps and mulligrubs set in;
With autumn evenings dysentery came,
And dusky typhoid lit his smouldering flame;
The blacksmith ailed—the carpenter was down,
And half the children sickened in the town.
The sexton's face grew shorter than before—
The sexton's wife a brand-new bonnet wore—
Things looked quite serious—Death had got a grip
On old and young, in spite of Doctor Rip.

And now the Squire was taken with a chill—
Wife gave "hot drops"—at night an Indian pill;
Next morning, feverish—bedtime, getting worse,
Out of his head—began to rave and curse;
The Doctor sent for—double quick he came:
Ant. Tart. gran. duo, and repeat the same
If no, et cetera. Third day—nothing new;
Percussed his thorax—set him cussing, too—
Lung-fever threatening—something of the sort—
Out with a lancet—let him bleed—a quart—
Ten leeches next—then blisters to his side;
Ten grains of calomel—just then he died.

The Deacon next required the Doctor's care—
Took cold by sitting in a draught of air—
Pains in the back, but what the matter is
Not quite so clear—wife calls it "rheumatiz."
Rubs back with flannel—gives him something hot—
"Ah!" says the Deacon, "that goes *nigh* the spot."
Next day a *rigor*—run, my little man,
And say the Deacon sends for Doctor Van.
The Doctor came—percussion as before,
Thumping and banging till his ribs were sore—
"Right side the flattest"—then more vigorous raps—
Fever—that's certain—pleurisy, perhaps.
A quart of blood will ease the pain, no doubt,
Ten leeches next will help to suck it out,
Then clap a blister on the painful part—
But first two grains of *Antimonium Tart.*
Last, with a dose of cleansing calomel
Unload the portal system—that sounds well!
But when the self-same remedies were tried,
As all the village knew, the Squire had died;
The neighbors hinted—"this will never do,
He's killed the Squire—he'll kill the Deacon too."

—Now when a doctor's patients are perplexed,
A *consultation* comes in order next—
You know what that is? In a certain place
Meet certain doctors to discuss a case
And other matters, such as weather, crops,
Potatoes, pumpkins, lager beer and hops.
For what's the use?—there's little to be said,
Nine times in ten your man's as good as dead—
At best a talk (the secret to disclose)
Where three men guess and *sometimes* one man knows.

The counsel summoned came without delay—
Young Doctor Green and shrewd old Doctor Gray—
They heard the story—"Bleed!" says Doctor Green,
"That's downright murder! cut his throat, you mean!
Leeches! the reptiles! Why, for pity's sake,
Not try an adder or a rattlesnake?
Blisters! Why bless you, they're against the law—
It's rank assault and battery if they draw!
Tartrate of Antimony! shade of Luke,
Stomachs turn pale at thought of such rebuke!
The portal system! What's the man about?
Unload your nonsense! Calomel's played out!
You've been asleep—you'd better sleep away
Till some one calls you"——
"Stop!" says Doctor Gray—
"The story is you slept for thirty years;
With brother Green, I own that it appears
You must have slumbered most amazing sound;
But sleep once more till thirty years come round,
You'll find the lancet in its honored place,
Leeches and blisters rescued from disgrace,
Your drugs redeemed from fashion's passing scorn,
And counted safe to give to babes unborn."

Poor sleepy Rip, M. M. S. S., M. D.,
A puzzled, serious, saddened man was he;
Home from the Deacon's house he plodded slow
And filled one bumper of "Elixir Pro."
"Good-bye," he faltered, "Mrs. Van, my dear!
I'm going to sleep, but wake me once a year;
I don't like bleaching in the frost and dew,
I'll take the barn, if all the same to you.
Just once a year—remember! no mistake!
Cry 'Rip Van Winkle! time for you to wake!
Watch for the week in May when laylocks blow,
For then the Doctors meet, and I must go."

—Just once a year the Doctor's worthy dame
Goes to the barn and shouts her husband's name,
"Come, Rip Van Winkle!" (giving him a shake)
"Rip! Rip Van Winkle! time for you to wake!
Laylocks in blossom! 'tis the month of May—
The Doctors' meeting is this blessed day,
And come what will, you know I heard you swear
You'd never miss it, but be always there!"

And so it is, as every year comes round,
Old Rip Van Winkle here is always found.
You'll quickly know him by his mildewed air,
The hayseed sprinkled through his scanty hair,
The lichens growing on his rusty suit—
I've seen a toadstool sprouting on his boot.
Who says I lie? Does any man presume—
Toadstool? No matter—call it a mushroom.
Where is his seat? He moves it every year;
But look, you'll find him—he is always here;
Perhaps you'll track him by a whiff you know,
A certain flavor of "Elixir Pro."

Now then, I give you—as you seem to think
We can drink healths without a drop to drink—
Health to the mighty sleeper! Long live he!
Our brother Rip, M.M.S.S., M.D.!

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